

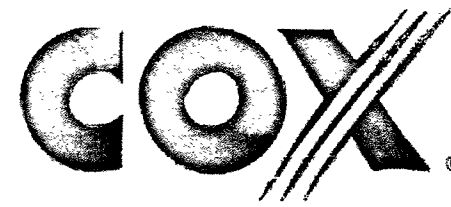
**AS-BUILT
BUILT PER PLAN**



2/2/18

Jason Dineen
Spectrum Services, Inc

DATE



33TM0068SMC
VG0010BA_61LAB
200.25 E CARSON AVE
LAS VEGAS, NV 89101
APN: 139-34-210-047

ALL CONSTRUCTION AND MATERIAL 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 SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST ISSUE; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.

CITY OF LAS VEGAS

APPROVED FOR CONSTRUCTION

THIS APPROVAL IS FOR WORK IN CLV R/W OR CLV EASEMENTS ONLY. OBTAINING PERMISSION OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

APPROVAL:  DATE: 12/19/17

~~117-01348 NO CLV PER #~~

APPROVALS

PROJECT MANAGER: _____ DATE: _____
CONSTRUCTION MANAGER: _____ DATE: _____
RF ENGINEER: _____ DATE: _____
SITE ACQUISITION: _____ DATE: _____
LANDLORD: _____ DATE: _____

PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON AN EXISTING STREETLIGHT WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL PROPOSED SMALL CELL EQUIPMENT ONTO EXISTING STREETLIGHT

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
LS-1	SITE SURVEY
A-1	SITE PLAN & EXHIBIT PHOTO
A-2	POLE ELEVATIONS & PLAN VIEWS
A-3	EQUIPMENT DETAILS
A-4	ANTENNA & MOUNT DETAILS
E-1	ELECTRICAL NOTES
E-2	ELECTRICAL ONE-LINE DIAGRAM
GN-1	GENERAL NOTES



CALL NEVADA ONE CALL
(800) 227-2600
CALL 3 WORKING DAYS
BEFORE YOU DIG!



VG0010BA_61LAB
33TM0068SMC
200.25 E CARSON AVE
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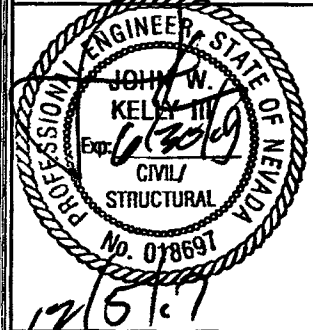
PROJECT NO: 113301.003.01

CHECKED BY: CCC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
C	9/11/17	CLM	PRELIMINARY REVIEW
D	9/29/17	GEH	PRELIMINARY REVIEW
E	10/12/17	SMM	PRELIMINARY REVIEW
F	10/27/17	EAM	PRELIMINARY REVIEW
G	12/05/17	BDH	CONSTRUCTION

B&T ENGINEERING, INC.
12685
Expires 12/31/17



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SHEET NUMBER: REVISION:

T-1

0

SHEET 1 OF 9

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE INFORMATION

PROPERTY OWNER: PUBLIC RIGHT-OF-WAY
APPLICANT ADDRESS: BLUESTREAM PROFESSIONAL SERVICES, LLC 33015 HIGHWAY 60 WEST FAIRBAULT, MN 55021 (507) 334-2268
LAT/LONG TYPE: NAD 83
LATITUDE: 36.16899189°
LONGITUDE: -115.1438864°
GROUND ELEVATION: ± 2013.8' AMSL
JURISDICTION: CITY OF LAS VEGAS
APN: 139-34-210-047
CURRENT ZONING: N-1
EXISTING LEASE AREA: N/A
EXISTING OCCUPANCY: U
PROJECT OCCUPANCY: U
EQUIPMENT LOCATION: OUTDOOR
ANTENNA LOCATION: EXISTING STREETLIGHT

CONSULTANT TEAM

ARCHITECT/ENGINEER: B+T GROUP 1717 S. BOULDER AVENUE TULSA, OK 74119 CONTACT: VICTOR MCAJUSTER- PROJECT MNGR TEL: (918) 587-4630 FAX: (918) 295-0265
CABLE OWNER/LANDLORD: COX NEVADA TELCOM, LLC 1700 VEGAS DRIVE LAS VEGAS, NV 89106 CONTACT: DANIELLE ETZBACH (404) 269-3997
OWNER REP: COX COMMUNICATIONS 1700 VEGAS DRIVE LAS VEGAS, NV 89106 CONTACT: ANTHONY EBERSOLE (702) 545-1643
DEVELOPER: COX NEVADA TELCOM, LLC ATTN: COX BUSINESS
POWER: NV ENERGY (702) 633-8400
FIBER: COX (702) 936-8898
TELEPHONE: CENTURYLINK (702) 361-3332

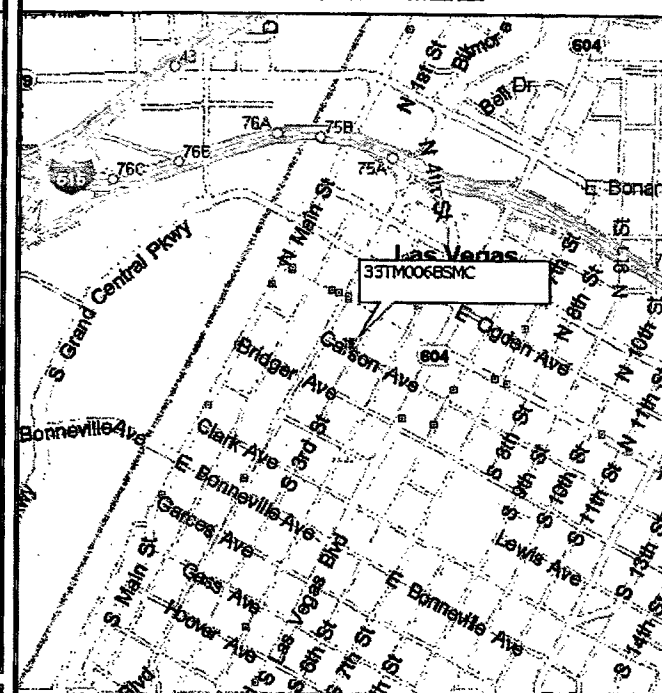
CODES

2012 INTERNATIONAL BUILDING CODE W/ NV STATE AMENDMENTS
2011 NATIONAL ELECTRICAL CODE W/ NV STATE AMENDMENTS

DO NOT SCALE DRAWINGS

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

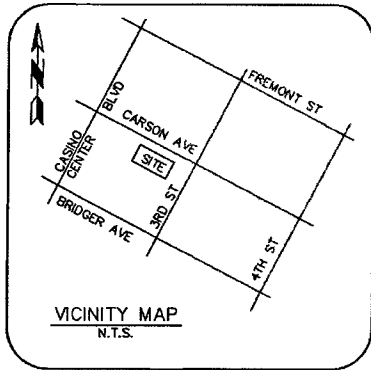
VICINITY MAP



DRIVING DIRECTIONS

DEPART COX VEGAS OFFICE ON VEGAS DR. TURN RIGHT ONTO (N) MARTIN L KING BLVD. TURN LEFT ONTO RAMP. TAKE RAMP (LEFT) ONTO I-515 [US-93]. AT EXIT 75B, TURN RIGHT ONTO RAMP. ROAD NAME CHANGES TO (N) CASINO CENTER BLVD. KEEP RIGHT TO STAY ON S CASINO CENTER BLVD. TURN LEFT ONTO CARSON AVE AND ARRIVE AT 33TM0068SMC.

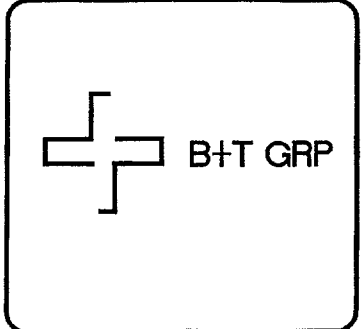
11/17/17
01348



**AS-BUILT
BUILT PER PLAN**

Jason Dineen 2/2/18
DATE

Jason Dineen
Spectrum Services, Inc



SITE NAME:
33TM0068SMC

SITE ADDRESS:
200.25 E. CARSON AVENUE
LAS VEGAS, NV 89101

SUBMITTALS

NO.	BY	DATE	SUBMITTAL
1	MJG	05/31/17	SITE SURVEY

NOTES

1. A TITLE REPORT WAS NOT PROVIDED AT THE TIME OF THE SURVEY.
2. THE BOUNDARY AND RIGHT-OF-WAY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OR A.L.T.A./N.S.P.S. TITLE SURVEY OF THE PROPERTY AND IS NOT INTENDED TO VERIFY OWNERSHIP. ANY CORNER OR CONTROL MONUMENTS SHOWN HEREON ARE FOR THE PURPOSE OF CONTROLLING RECORD BOUNDARY OR RIGHT-OF-WAY INFORMATION. THE SURVEYOR HAS NOT MADE CORNER DETERMINATIONS ON ANY SUCH MONUMENTS.
3. SURVEYOR DOES NOT GUARANTEE THE LOCATION, EXISTENCE, SIZE OR DEPTH OF ANY PUBLIC OR PRIVATE UTILITY. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON MARKINGS PROVIDED BY THE UTILITY PROVIDERS OR FROM THE CITY OF LAS VEGAS GIS MAPS AND IS APPROXIMATE IN LOCATION. ADDITIONAL UTILITY FACILITIES MAY BE PRESENT IN THE PROJECT AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT BLUE STAKE AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

BASIS OF BEARING

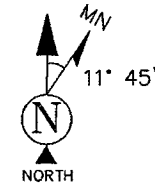
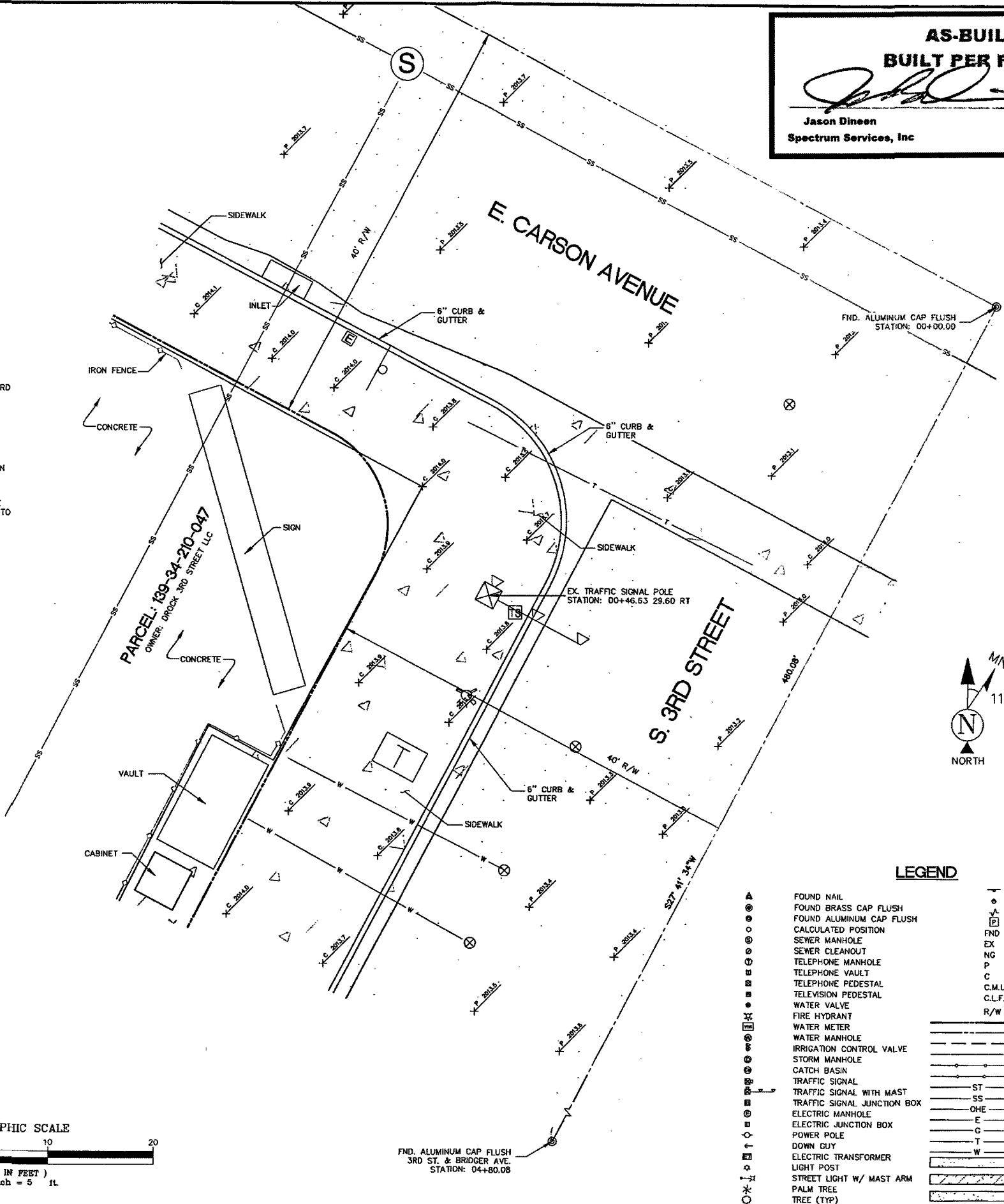
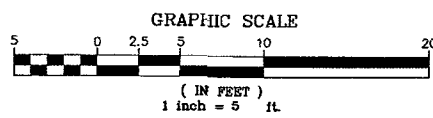
THE MONUMENT LINE OF 3RD STREET BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM NEVADA STATE PLANE ZONE EAST, DETERMINED BY GPS OBSERVATIONS.
BEARING=SOUTH 27°41'34" WEST

CENTER OF GEODETIC COORDINATES

EXISTING TRAFFIC SIGNAL POLE LOCATION
LATITUDE: 36° 10' 08.326" NORTH (NAD83)
LONGITUDE: 115° 08' 37.895" WEST (NAD83)
ELEVATION @ GRADE = 2013.8' (NAVD88)

SITE BENCHMARK

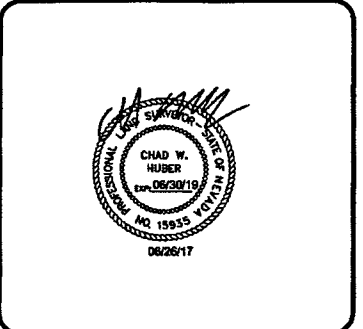
ALUMINUM CAP FLUSH AT THE CENTERLINE INTERSECTION OF CARSON AVENUE & 3RD STREET.
ELEVATION=2013.20' (NAVD=88)



LEGEND

- | | | | |
|---|-----------------------------|--------|-------------------------|
| ▲ | FOUND NAIL | T | SIGN |
| ● | FOUND BRASS CAP FLUSH | ○ | BOLLARD |
| ○ | FOUND ALUMINUM CAP FLUSH | △ | BREAKLINE |
| ○ | CALCULATED POSITION | □ | PARKING METER |
| ○ | SEWER MANHOLE | FND | FOUND |
| ○ | SEWER CLEANOUT | EX | EXISTING |
| ○ | TELEPHONE MANHOLE | NG | NATURAL GRADE |
| ○ | TELEPHONE VAULT | P | PAVEMENT GRADE |
| ○ | TELEPHONE PEDESTAL | C | CONCRETE GRADE |
| ○ | TELEVISION PEDESTAL | C.M.U. | CONCRETE MASONARY UNIT |
| ○ | WATER VALVE | C.L.F. | CHAIN LINK FENCE |
| ○ | FIRE HYDRANT | R/W | RIGHT-OF-WAY |
| ○ | WATER METER | --- | RIGHT-OF-WAY LINE |
| ○ | WATER MANHOLE | --- | ADJOINING BOUNDARY LINE |
| ○ | IRRIGATION CONTROL VALVE | --- | EASEMENT LINE |
| ○ | STORM MANHOLE | --- | CENTERLINE |
| ○ | CATCH BASIN | --- | CHAIN LINK FENCE |
| ○ | TRAFFIC SIGNAL | --- | IRON FENCE |
| ○ | TRAFFIC SIGNAL WITH MAST | ST | U/G STORM SEWER LINE |
| ○ | TRAFFIC SIGNAL JUNCTION BOX | SS | U/G SANITARY SEWER LINE |
| ○ | ELECTRIC MANHOLE | OHE | O/H ELECTRIC LINE |
| ○ | ELECTRIC JUNCTION BOX | E | U/G ELECTRIC LINE |
| ○ | POWER POLE | G | U/G GAS LINE |
| ○ | DOWN GUY | T | U/G COMMUNICATIONS LINE |
| ○ | ELECTRIC TRANSFORMER | W | U/G WATER LINE |
| ○ | LIGHT POST | --- | PAVED AREA |
| ○ | STREET LIGHT W/ MAST ARM | --- | BRICK AREA |
| ○ | PALM TREE | --- | CONCRETE AREA |
| ○ | TREE (TYP) | | |

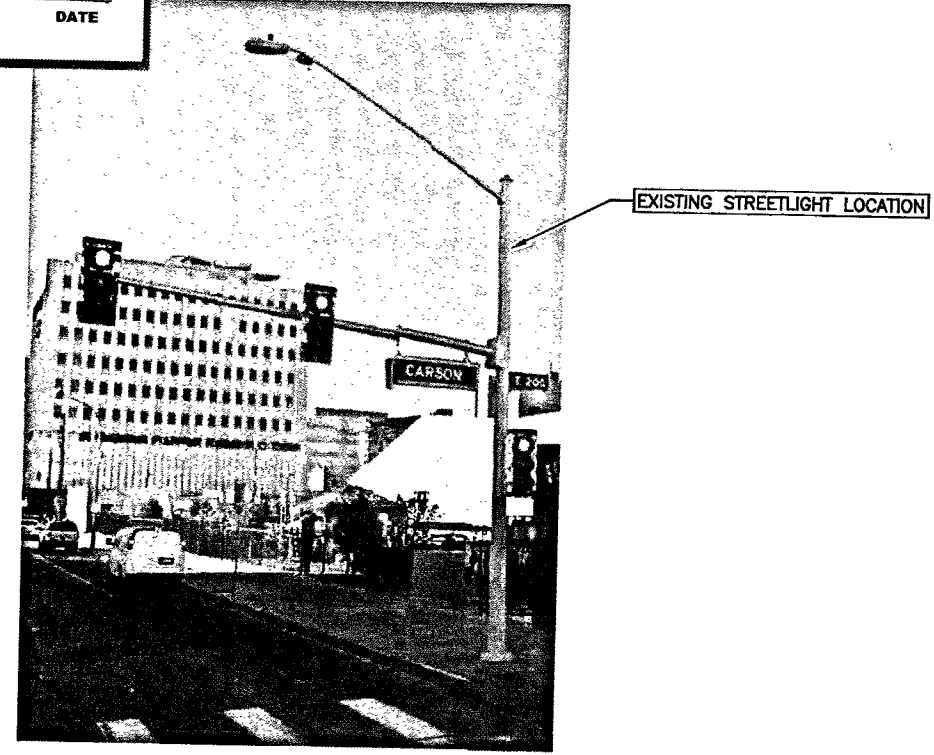
24654 N. LAKE PLEASANT PKWY #103-163
PEORIA, AZ 85383
P. 480-440-1748
F. 623-777-1782
www.terramarksurveying.com



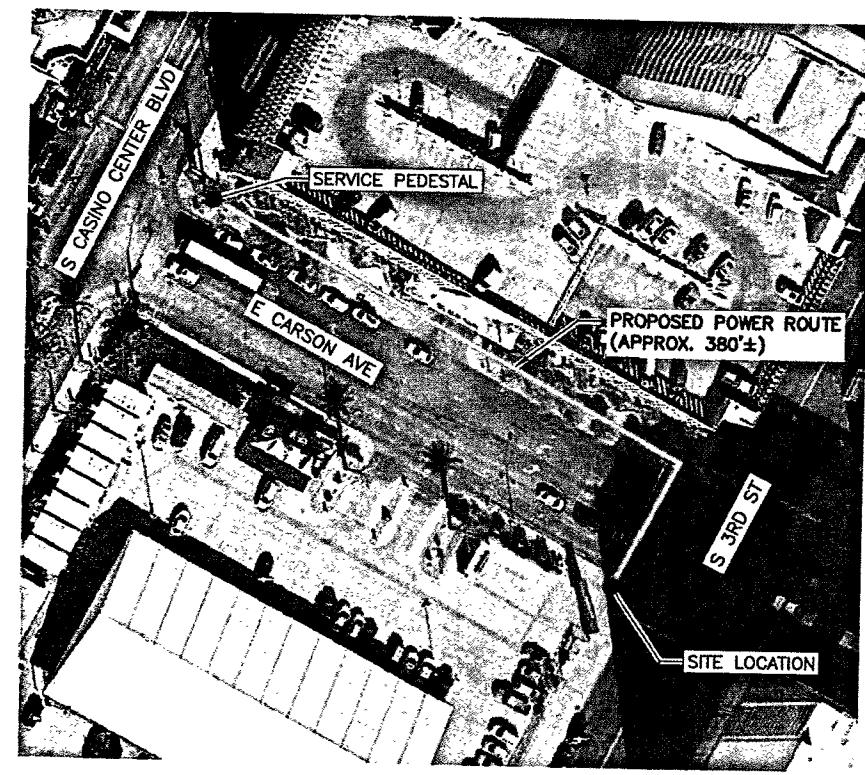
SITE SURVEY

JOB NO: 1502005-68	FIELD BY: MJG	DRAWN BY: MJG
-----------------------	------------------	------------------

SHEET NO.: 2 OF 9
SHEET NAME: LS-1



1 PHOTO ELEVATION
 SCALE: N.T.S.

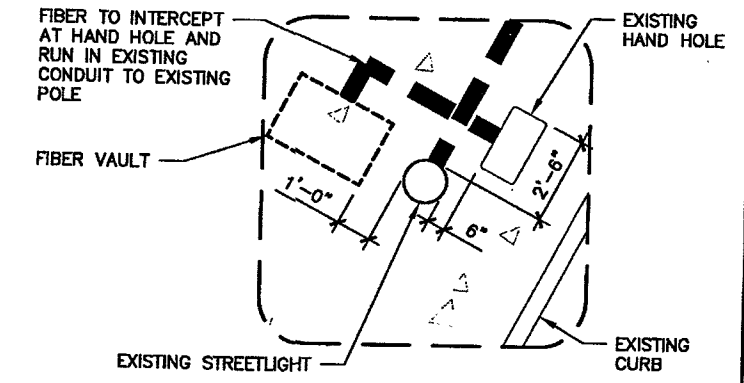


2 AERIAL SITE LOCATION
 SCALE: N.T.S.

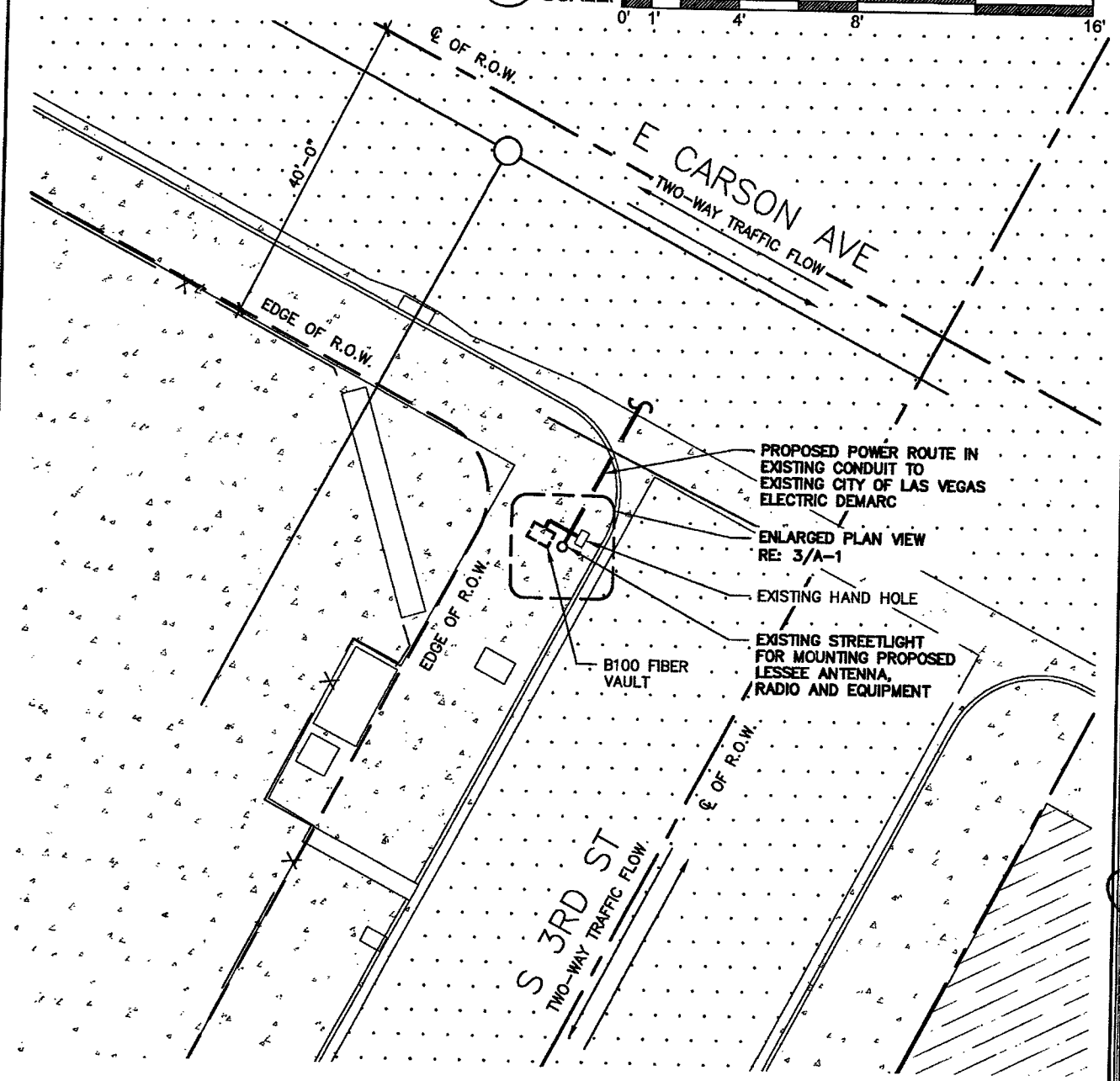
NOTE:
 THIS SITE PLAN WAS GENERATED WITH THE USE OF A SURVEY. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

NOTE:
 THE EXISTING IMPROVEMENTS SHOWN HEREIN ARE BASED ON ACTUAL FIELD MEASUREMENTS AND OBSERVATIONS PERFORMED ON APRIL 31, 2017

LEGEND:
 ROAD/EDGE OF PAVEMENT
 CENTERLINE OF R.O.W.
 RIGHT OF WAY
 PROPERTY LINE



3 HAND HOLE PLACEMENT
 SCALE: 0' 1' 4' 8' 16'



4 ENLARGED SITE PLAN
 SCALE: 0' 10' 20' 30' 40'



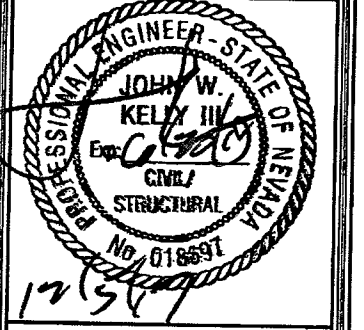
VG0010BA_61LAB
 33TM0068SMC
 200.25 E CARSON AVE
 LAS VEGAS, NV 89101

PROJECT NO: 113301.003.01
 CHECKED BY: CCC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
C	9/11/17	GLM	PRELIMINARY REVIEW
D	9/29/17	GEH	PRELIMINARY REVIEW
E	10/12/17	SMM	PRELIMINARY REVIEW
F	10/27/17	EAM	PRELIMINARY REVIEW
O	12/05/17	BDH	CONSTRUCTION

B&T ENGINEERING, INC.
 12685
 Expires 12/31/17



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SHEET NUMBER: A-1	REVISION: 0
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SHEET 3 OF 9

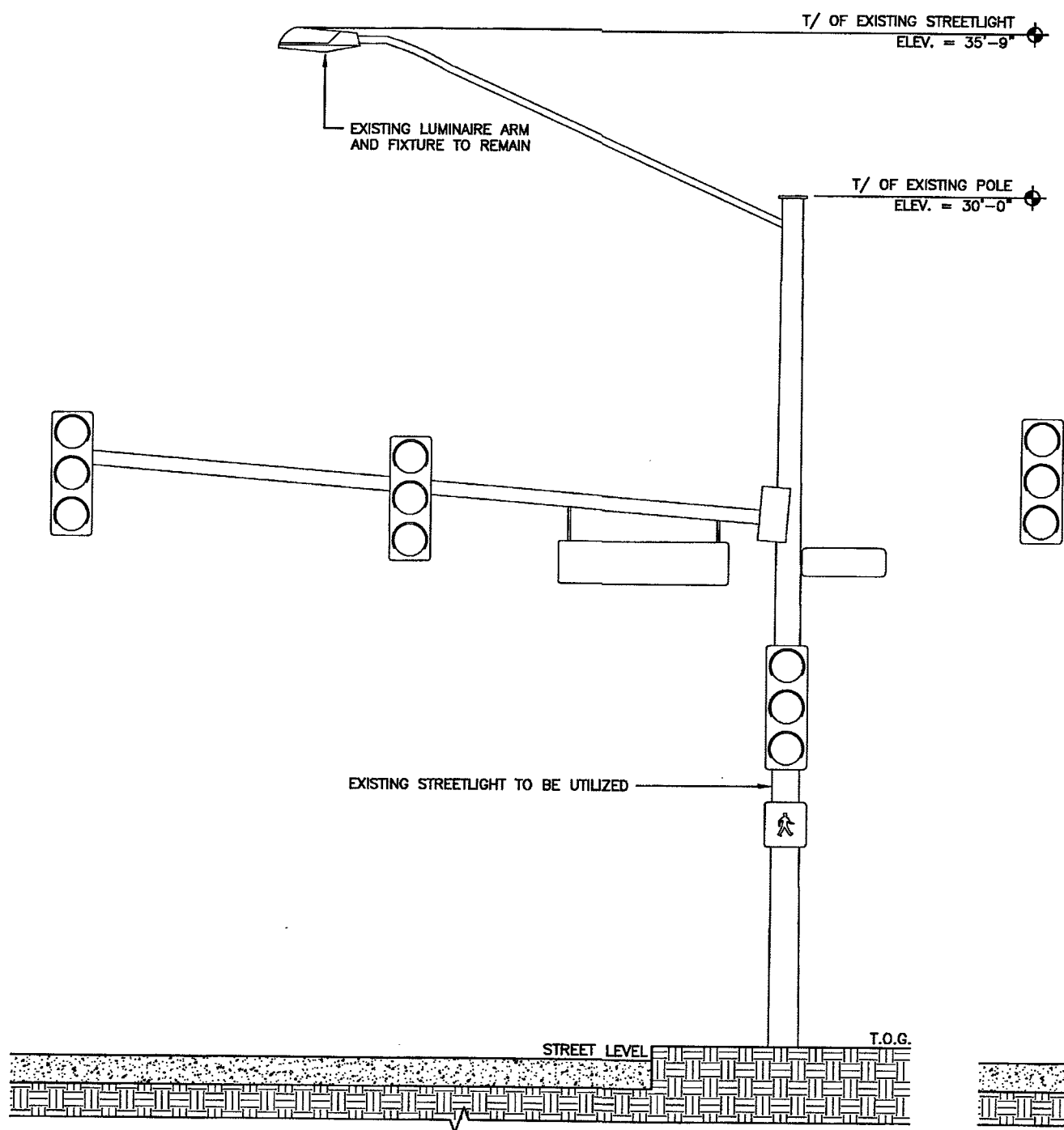
113301.003_VG0010BA_61LAB_33TM0068SMC.dwg - Sheet A-1 - User: bchimbuch - Date: 05/23/2017 - 1:54pm

NOTE:
NEW EQUIPMENT SHOWN ON THIS PLAN HAS BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, CONTRACTOR SHALL REFER TO STRUCTURAL ANALYSIS FOR APPROVAL OF ADDITIONAL NEW APPURTENANCES.

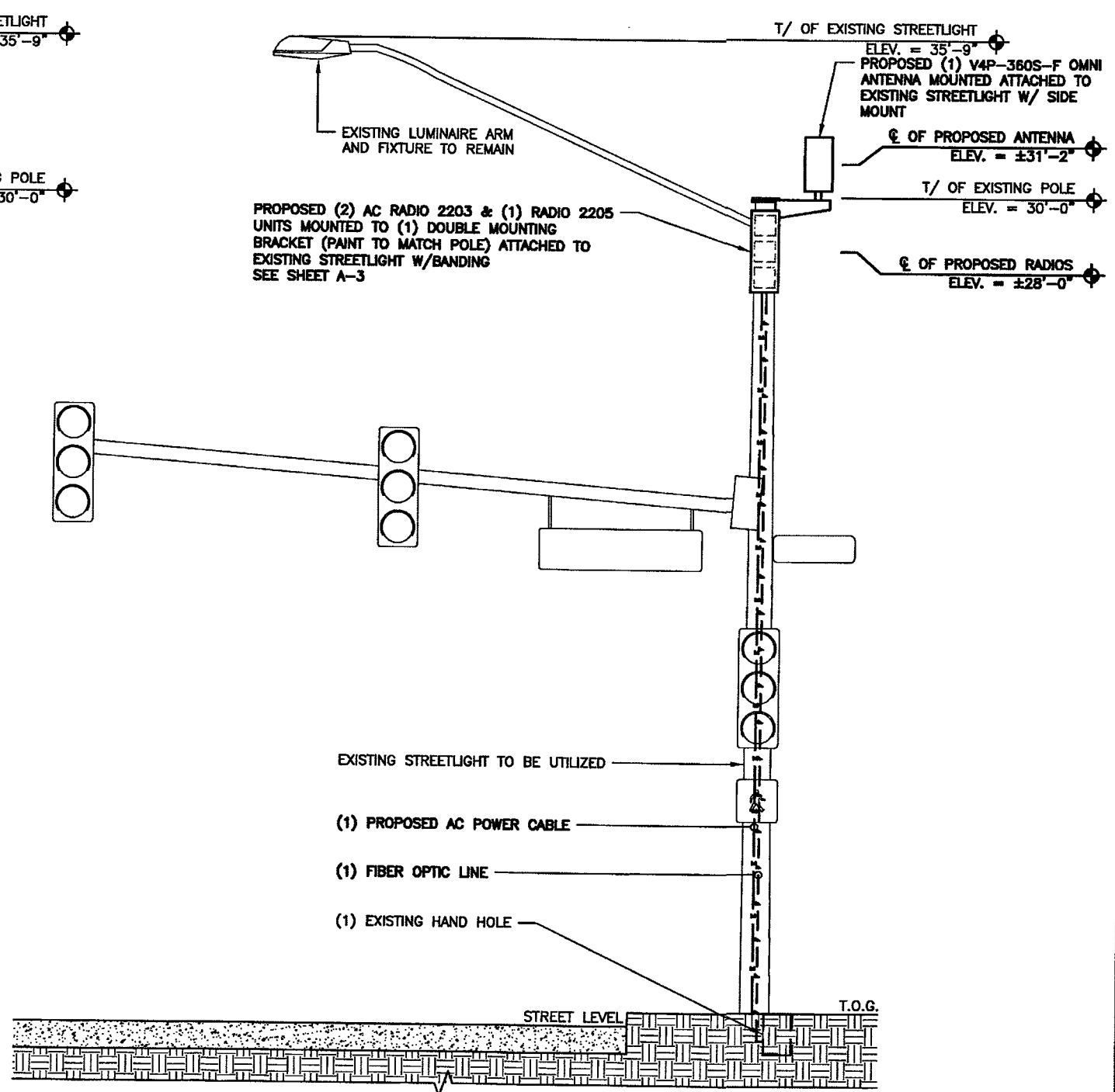
**AS-BUILT
BUILT PER PLAN**

Jason Dineen 2/2/18
Jason Dineen DATE
Spectrum Services, Inc

SITE NOTES:
1. ALL PROPOSED EQUIPMENT WILL BE PAINTED TO MATCH POLE, PER JURISDICTIONAL REQUIREMENT.



1 EXISTING POLE ELEVATION
SCALE: 0' 1' 4' 8' 16'



2 FINAL POLE ELEVATION
SCALE: 0' 1' 4' 8' 16'



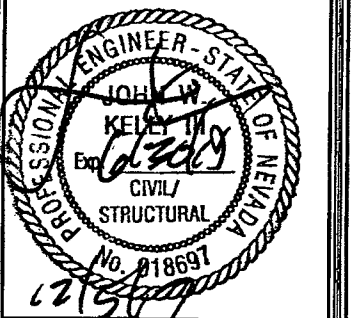
VG0010BA_61LAB
33TM0068SMC
200.25 E CARSON AVE
LAS VEGAS, NV 89101

PROJECT NO: 113301.003.01
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SHEET NUMBER: A-2
REVISION: 0
SHEET 4 OF 9

113301.003_VG0010BA_33TM0068SMC.dwg -- Shrivastava-2 -- User: bhrish-bhosh -- Dec 05, 2017 -- 1:54pm

**AS-BUILT
BUILT PER PLAN**

John Dineen 2/2/18
Jason Dineen DATE
Spectrum Services, Inc



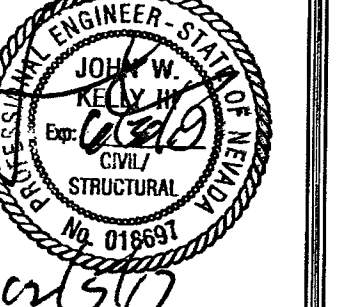
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LAS VEGAS, NV 89101

PROJECT NO: 113301.003.01
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ISSUED FOR:

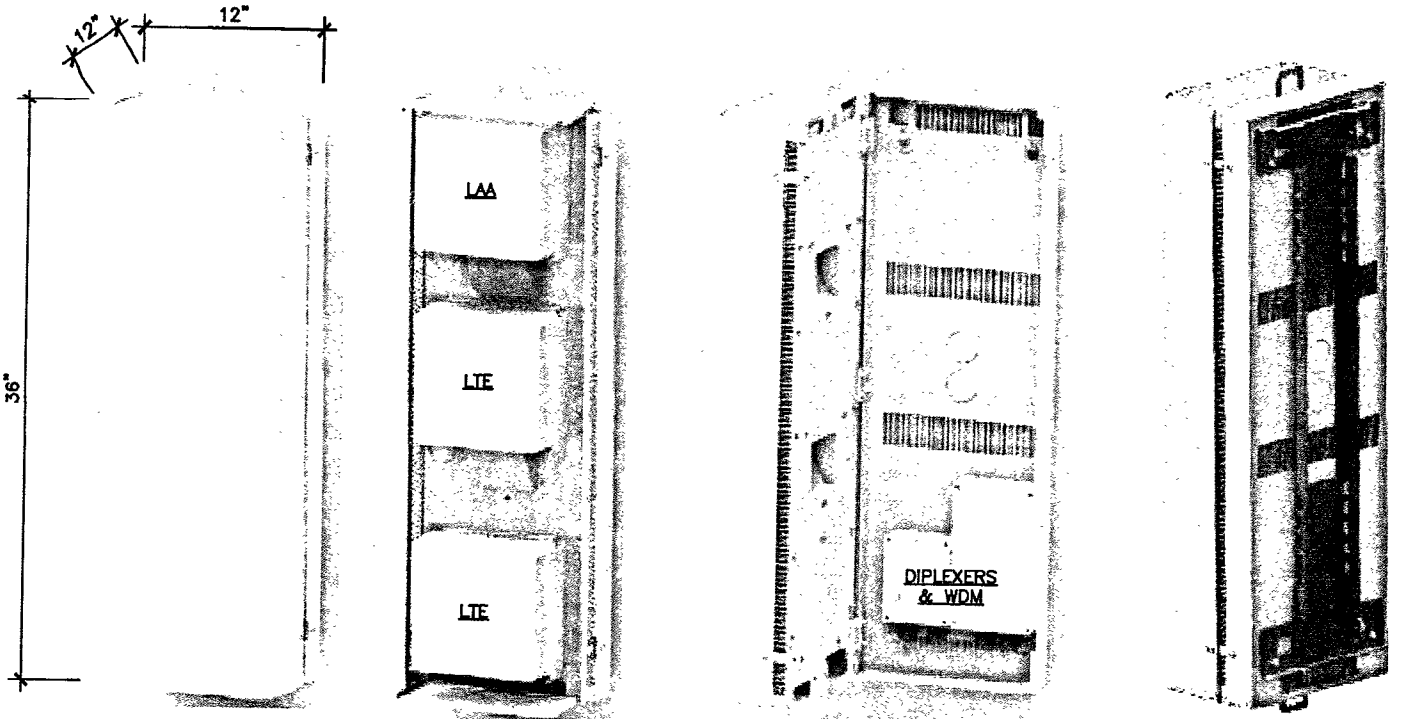
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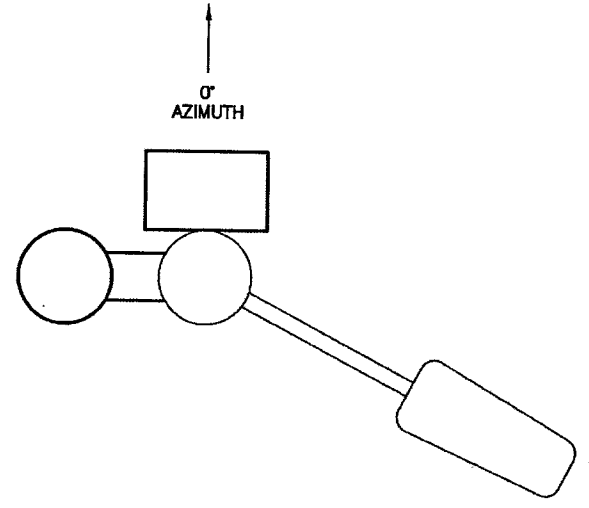
SHEET NUMBER: A-3 REVISION: 0
SHEET 5 OF 9



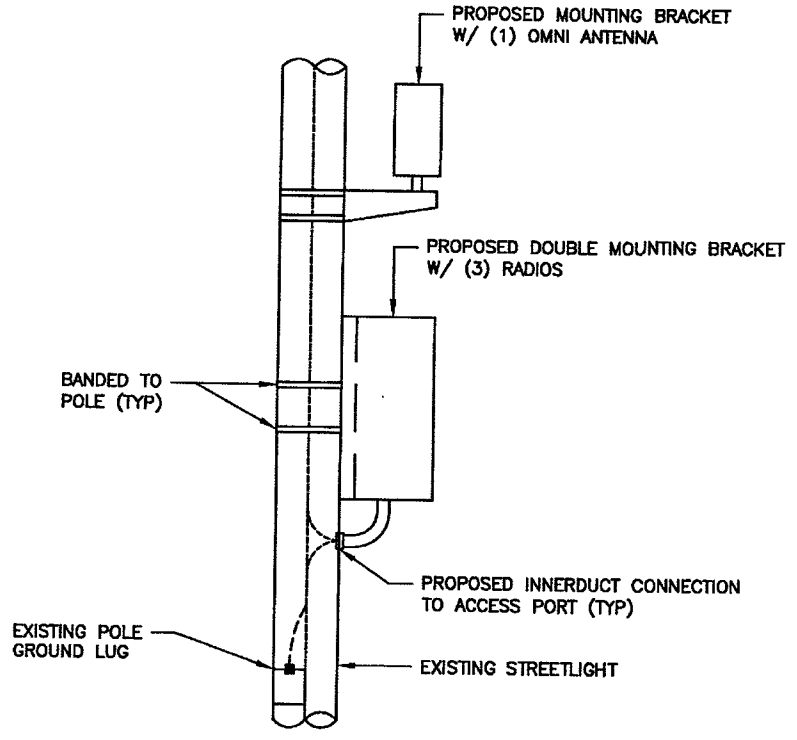
1 ANTENNA & RADIO MOUNT DETAIL
SCALE: N.T.S.

- Standard 3 radio (small cells) site solution
- Tech/Band support : LTE (B66 & B2) & LAA (B46)
- RRH Configuration (3 radios) : 2 x 2203 radio + 1x 2205 radio
- 2X2 MIMO support for LTE & LAA
- Integrated or External antenna option
 - Diplexers for external antenna for LTE
 - LAA radio connects directly to external antenna ports (no diplexing)
 - RF transparent cover for integrated Panel antenna configuration
 - Integrated Omni antenna option is NOT available
- Passive Wave Division Multiplexing (WDM) to leverage single pair of dark fiber
- Form factor and weight: approx. 3cu ft (LxWxD : 36x12x12 in), approx. 90lbs
- Passively Cooled. No external fans
- No Power distribution unit inside the shroud
- Light pole or Utility pole mounting brackets

2 ERICSSON SMALL CELL SITE SOLUTION - 3 UNIT "FACE OUT"
SCALE: N.T.S.



3 ANTENNA PLAN VIEW
SCALE: N.T.S.



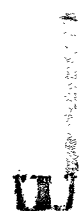
4 EQUIPMENT PLACEMENT DETAIL
SCALE: N.T.S.

1:13301.003_0008106Y_33TM0068SMC.dwg - User: bncrbach - Dec 05, 2017 - 1:54pm

Product Specifications

COMMSCOPE®

CommScope—Proprietary and Confidential. Preliminary specifications are for illustrative purposes only and will be updated prior to publication.



V4P-360SF
10-port small cell antenna, 8x 1695-2690 and 2x 5150-5925 MHz. 360° Horizontal Beamwidth, fixed tilt.

Electrical Specifications

Frequency Band, MHz	1695-2690	1920-2180	2300-2690	5150-5925
Gain, dBi	5.5	10.0	10.3	5.4
Beamwidth, Horizontal, degrees	260	360	360	360
Beamwidth, Vertical, degrees	19.5	17.5	14.0	27.0
Beam Tilt, degrees	7	7	7	0
Isolation, dB	25	25	25	25
Isolation, Intersystem, dB	20	20	20	20
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port, maximum, watts	125	125	125	10
Polarization	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm

General Specifications

Operating Frequency Band	1695 - 2690 MHz 5150 - 5925 MHz
Antenna Type	Small Cell
Band	Multiband
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	10
RF Connector Quantity, high band	10
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	ASA, UV stabilized
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	140.0 N @ 150 km/h 31.5 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	500.0 mm 23.6 in
Outer Diameter	305.0 mm 12.0 in
Net Weight, without mounting kit	11.4 kg 25.1 lb

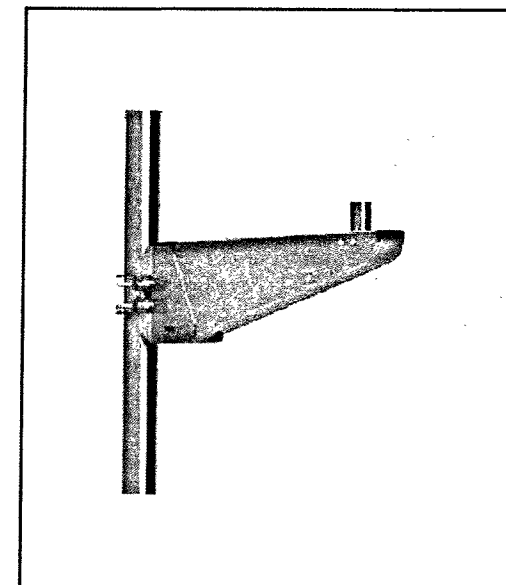
Universal Side Arm Antenna Brackets

[180E051_000 | Side Arm Antenna Bracket]

Compatible Antenna Adapters:

[180E044_000 | 12" CommScope Antenna Adapter]

[180E046_000A | 15" Universal Antenna Adapter]



Design Features:

- Antenna agnostic bracket
- Mounts to any round metal or wood pole
- U-bolt mounting system scales to fit pole diameter; U-bolt saddles available for custom applications
- Hot-dipped galvanized steel body
- High-strength stainless hardware available for harsh environments
- Powdercoat finish available in any required color
- 2" Dia. Antenna extension pole height set to customer requirements
- Removable access panel allows for mounting diplexers or splitters inside mount
- Compatible with tapered poles
- Bracket and cable shrouding options available

Product Specifications:

- 360 degree azimuth correction
- +/- 12 degree down tilt correction
- +/- 5 degree roll correction
- Dimensions: 46"L x 10"W x 16"H
- Approximately 40 lbs

AS-BUILT
BUILT PER PLAN

Jason Dineen 2/2/18
DATE

Jason Dineen
Spectrum Services, Inc

B+T GRP

BLUESTREAM

COX

VG0010BA_61LAB
33TM0068SMC
200.25 E CARSON AVE
LAS VEGAS, NV 89101

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B&T ENGINEERING, INC.
12685
Expires 12/31/17

PROFESSIONAL ENGINEER - STATE OF NEVADA
JOHN W. KELLY III
Exp. 07/30
CIVIL / STRUCTURAL
No. 018637

12/5/17

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SHEET NUMBER:	REVISION:
A-4	0
SHEET 6 OF 9	

1 ANTENNA SPEC SHEET
SCALE: N.T.S.

2 ANTENNA MOUNTING BRACKET SPEC SHEET
SCALE: N.T.S.

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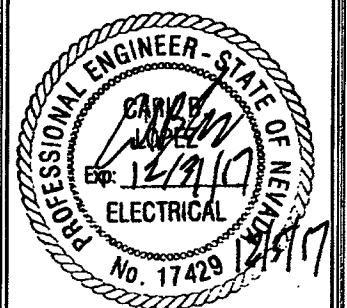
VG0010BA_61LAB
 33TM0068SMC
 200.25 E CARSON AVE
 LAS VEGAS, NV 89101

PROJECT NO: 113301.003.01
 CHECKED BY: CCC

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
C	9/11/17	CLM	PRELIMINARY REVIEW
D	9/29/17	GEH	PRELIMINARY REVIEW
E	10/12/17	SMM	PRELIMINARY REVIEW
F	10/27/17	EAM	PRELIMINARY REVIEW
0	12/05/17	BDH	CONSTRUCTION

B&T ENGINEERING, INC.
 12685
 Expires 12/31/17



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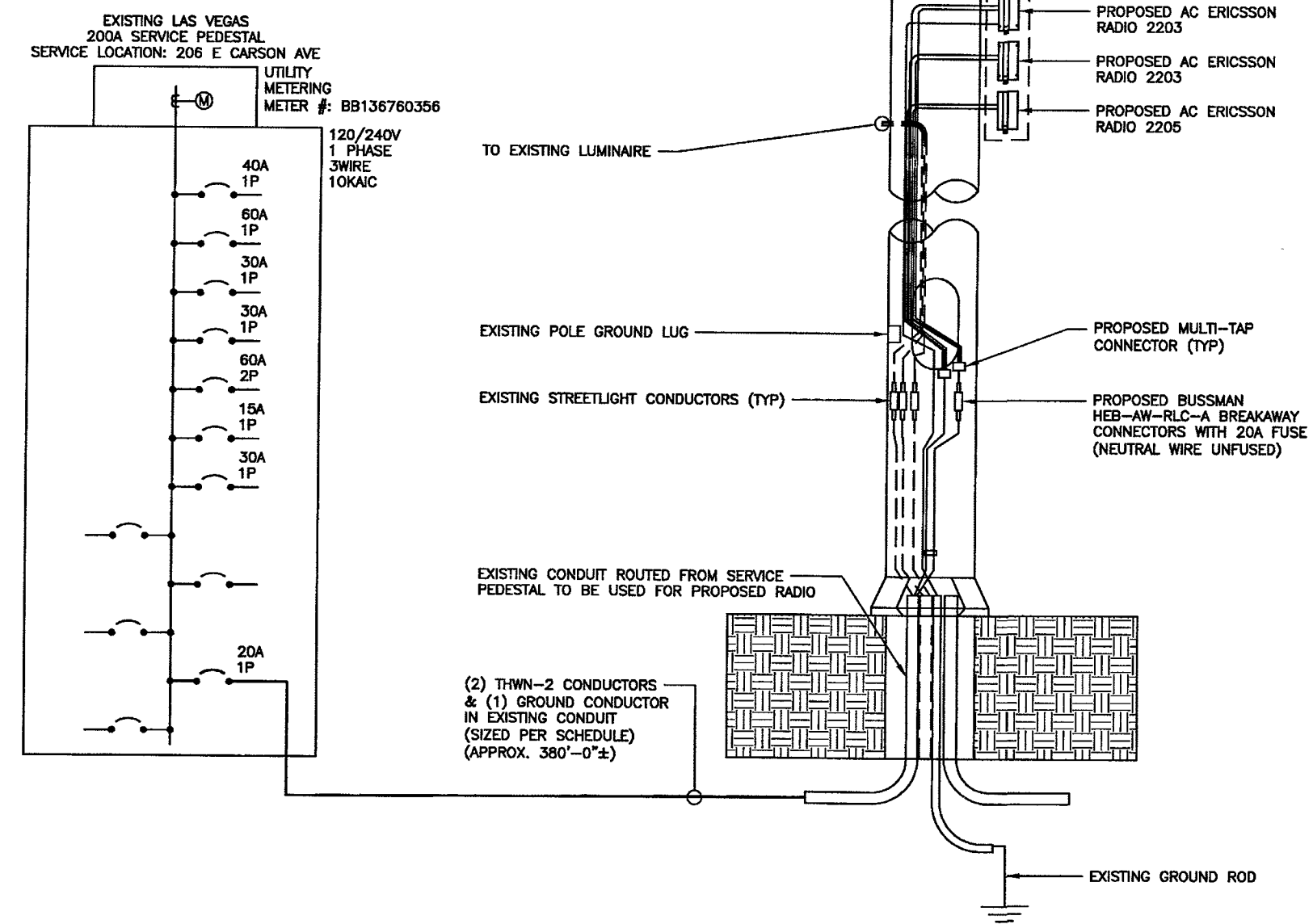
SHEET NUMBER: E-2
 REVISION: 0
 SHEET 8 OF 9

- NOTES:
- CONTRACTOR IS TO FIELD VERIFY ALL EXISTING ITEMS SHOWN ON THE ELECTRICAL ONE-LINE DIAGRAM AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - ALL NEW CONDUCTOR WIRE TO BE INSTALLED SHALL BE COPPER THWN-2, THW-2, RHW-2, XHH2-2 WIRE UNLESS NOTED OTHERWISE.
 - ALL GROUNDING AND BONDING TO BE PER THE RECOGNIZED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC).
 - ALL INSTALLED CONDUCTORS AND SIGNAL CABLES TO BE CLEARLY MARKED "COX COMMUNICATIONS" WITH BRASS OR FIBERGLASS TAGS.

SITE NAME:		PROPOSED ELECTRICAL LOADING														
PANEL DESIGNATION:		SUPPLY VOLTAGE: 120 V														
CITY OF LAS VEGAS LIGHTING PEDESTAL		PHASE: 2														
		WIRE: 5														
CKT	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	USAGE FACTOR	BREAKER AMPS	PHASE A VA	PHASE B VA	USAGE FACTOR	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	ERICSSON RADIO 2203 & 2205	20	1	ON	300	1.00	300									2
NOTES:					PHASE A TOTAL VA		300									
					PHASE B TOTAL VA		0									
					TOTAL EVA		0.50									
					TOTAL AMPS		2.50									

AS-BUILT
BUILT PER PLAN

 2/2/18
 Jason Dinsen
 Spectrum Services, Inc
 DATE



1 ELECTRICAL ONE LINE DIAGRAM
 SCALE: N.T.S.

120VAC FEEDER CONDUCTOR MAXIMUM DISTANCE			
CONDUCTOR SIZE	GROUND SIZE	MAX. DISTANCE	% OF VOLTAGE DROP
#14 AWG	#12 AWG	260'-0"	2.99% VOLT DROP @ 2.5A
#12 AWG	#12 AWG	400'-0"	3.02% VOLT DROP @ 2.5A
#10 AWG	#10 AWG	675'-0"	2.99% VOLT DROP @ 2.5A
#8 AWG	#8 AWG	1500'-0"	2.95% VOLT DROP @ 2.5A
#6 AWG	#6 AWG	2000'-0"	3.00% VOLT DROP @ 2.5A
#4 AWG	#4 AWG	2700'-0"	2.97% VOLT DROP @ 2.5A

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ENGINEER'S GENERAL NOTES

1. ALL EXISTING UTILITY LINES SHOWN ON THE PLANS ARE FROM AVAILABLE UTILITY RECORDS. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION BEFORE STARTING CONSTRUCTION.
2. DISPOSAL OF ALL WASTE MATERIAL AT AN APPROVED DISPOSAL SITE, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS.
4. THE CONTRACTOR SHALL FURNISH ALL CONSTRUCTION STAKING AT HIS EXPENSE.
5. THE CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AHEAD OF CONSTRUCTION, TO ALLOW FOR ANY NECESSARY ADJUSTMENT IN GRADE LINE AND TO VERIFY PIPE TYPES FOR ORDERING PROPER TRANSITION AND/OR TIE-IN FITTINGS WHICH MAY BE REQUIRED.
6. TRENCH EXCAVATION, BACKFILLING AND COMPACTION SHALL BE IN ACCORDANCE WITH CLARK COUNTY UNIFORM STANDARD DRAWING NO. 208 EXCEPT AS NOTED OTHERWISE.
7. ALL EXISTING IMPROVEMENTS (PAVING, CURB, GUTTER, SIDEWALK, LANDSCAPING, ETC.) THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED "IN-KIND" AS DIRECTED BY THE ENGINEER, OWNER/DEVELOPER OR AGENCY INSPECTORS.
8. THE PLANS PREPARED FOR THIS PROJECT PRESENT A DESCRIPTION OF THE WORK TO BE ACCOMPLISHED. THE CONTRACTOR SHALL VISIT THE PROJECT SITE AND DETERMINE, FROM HIS OWN INSPECTION, THE CONDITIONS UNDER WHICH IT IS TO BE PERFORMED. THE CONTRACTOR, BY MAKING HIS BID, REPRESENTS THAT HE HAS VISITED THE SITE AND FAMILIARIZED HIMSELF WITH LOCAL CONDITIONS, THE TYPE OF WORK TO BE PERFORMED, EVALUATED THE DIFFICULTY OF PERFORMING THE REQUIRED TASKS, AND THE LABOR, EQUIPMENT AND MATERIAL THAT ARE REQUIRED TO PROVIDE A COMPLETE PROJECT.

SPECIAL AS-BUILD PLAN NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION AND SUBMITTAL OF ALL AS-BUILT PLANS TO THE GOVERNING AGENCY.

CLARK COUNTY CONSTRUCTION NOTES

1. INSPECTIONS ARE REQUIRED. CALL 24 HOURS IN ADVANCE TO SCHEDULE AT (702) 455-4810. PERMIT, APPROVED PLANS, AND BARRICADE PLANS FOR THIS WORK MUST BE ON THE JOB SITE AT ALL TIMES.
2. EXACT LOCATION OF ALL SAW-CUT LINES SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
3. CURB AND GUTTER WITH A GRADE OF LESS THAN 4/10 OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
4. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ON-HALF (1/2") INCH ABOVE THE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
5. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA AND CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, LATEST REVISION.
6. PRIVATE STREETS, CURBS, GUTTERS, AND VALLEY GUTTERS REFLECTED ON THESE PLANS ARE TO BE INSPECTED BY A CLARK COUNTY INSPECTOR.
7. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING EXACT LOCATION OF RAMPS SHALL BE DETERMINED IN THE FIELD BY CLARK COUNTY PUBLIC WORKS INSPECTOR.
8. PROPER SIGNS, BARRIERS, BARRICADES AND LIGHTS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. TRAFFIC, SCHOOL, OR STREET SIGNS OF ANY KIND ARE NOT TO BE MOVED FOR ANY REASON WITHOUT FIRST COORDINATING WITH THE DEPARTMENT OF PUBLIC WORKS INSPECTIONS AT (702) 455-4810.
9. THIS PLAN DOES NOT AUTHORIZE CLOSURE OF ANY ROAD OR STREET.
10. NO OPEN TRENCH SHALL BE ALLOWED ACROSS ANY STREET OR WITHIN TEN (10) FEET OF ANY TRAVEL-WAY, EXCEPT WHEN WORK IS IN ACTUAL PROGRESS. AREAS COVERED BY ACCEPTABLE STEEL PLATE ARE NOT TO BE CONSTRUCTED AS A TRENCH. NO OPEN TRENCH IS PERMITTED IN EXCESS OF 500 FEET OR LENGTH NECESSARY TO ACCOMMODATE PIPE INSTALLATION IN A SINGLE DAY, WHICHEVER IS GREATER. ALL TRENCH CROSSINGS AND BACKFILL SHALL MEET THE STANDARD SPECIFICATION UNLESS OTHERWISE STATED.
11. A TEMPORARY PATCH IS TO BE IN PLACE AT THE END OF EACH WORK DAY WHERE THE BACKFILL IN THE TRENCH HAS BEEN COMPLETED AND PRIOR TO OPENING THE WORK AREA BACK TO TRAFFIC AND IS TO BE MAINTAINED BY THE PERMITTEE. A PERMANENT PATCH IS TO BE IN PLACE WITHIN THIRTY (30) DAYS AFTER THE INSTALLATION OF THE TEMPORARY PATCH.
12. COMPACTION TESTS ARE REQUIRED.

CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "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".
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 FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS

SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.

10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
12. 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.
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 PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

WALL NOTES:

16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.

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

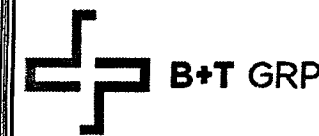
21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM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

OR
SANITARY SEWER AND STORM DRAIN FACILITIES SHOWN ON THESE PLANS SHALL BE USED TO MEET THE REQUIREMENTS OF 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, AND 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.

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

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

24. REVISED 02/03/15



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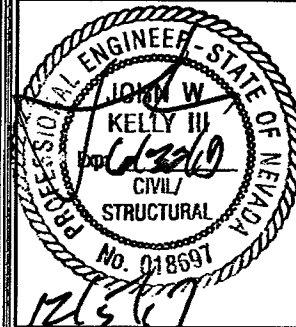
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12685
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SHEET NUMBER: REVISION:

GN-1 0
SHEET 9 OF 9

**AS-BUILT
BUILT PER PLAN**

Jason Dineen

Jason Dineen
Spectrum Services, Inc

2/2/18

DATE