

**Stantec Consulting Inc.**  
 8763 W Charleston Blvd  
 Las Vegas NV U.S.A.  
 89146-1049  
 Tel 702.258 0115  
 Fax 702.258 4956  
 www.stantec.com

**Stantec**

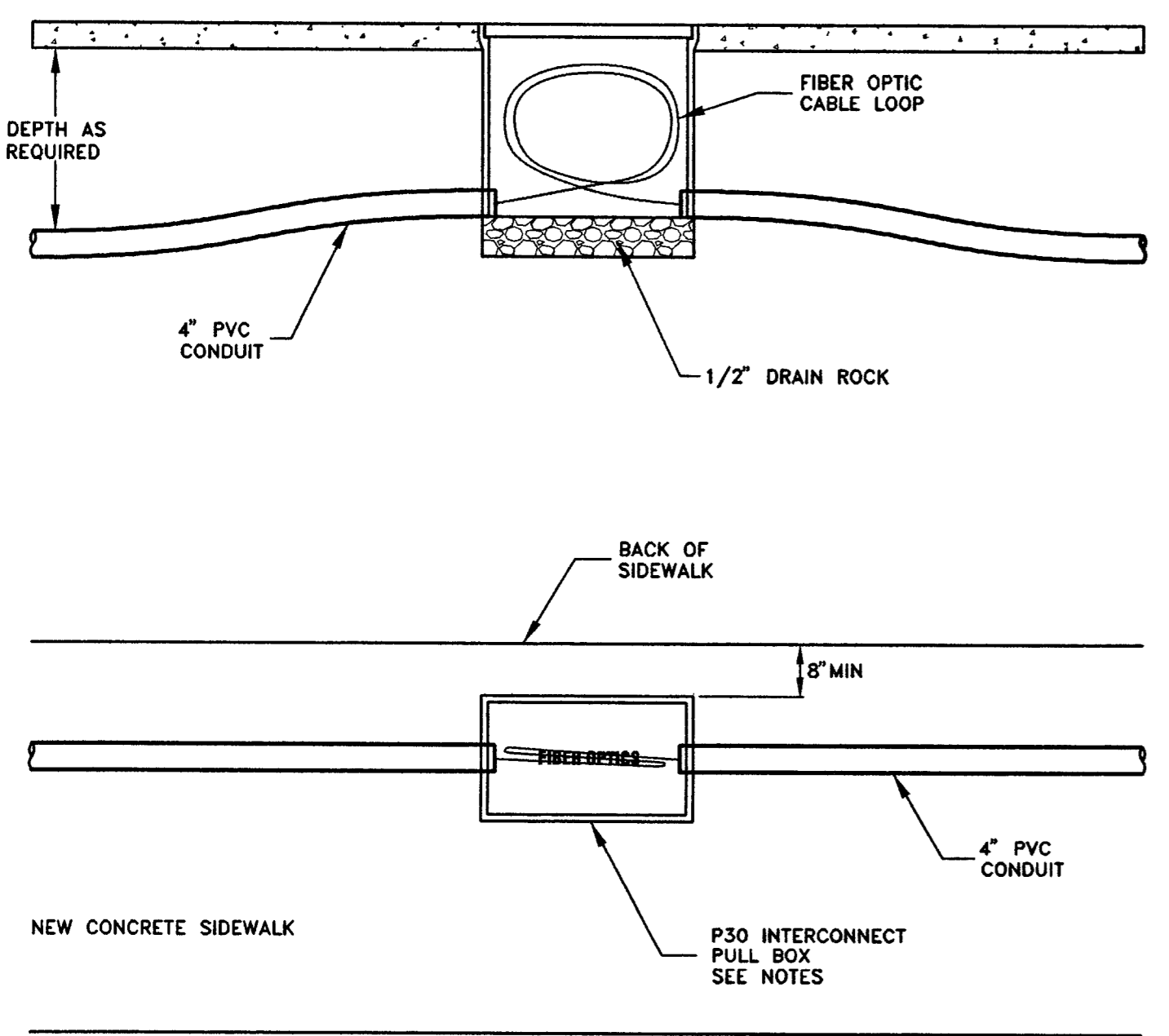
NO.	DATE	DESCRIPTION	APP'D

DEPARTMENT OF PUBLIC WORKS  
 ENGINEERING DESIGN SECTION  
 CITY ENGINEER: CHARLES KAJKOWSKI JR., P.E.  
 DESIGNED BY: JO.DD  
 DRAWN BY: DD  
 CHECKED BY: MW  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'  
 DATE: 06/11/02

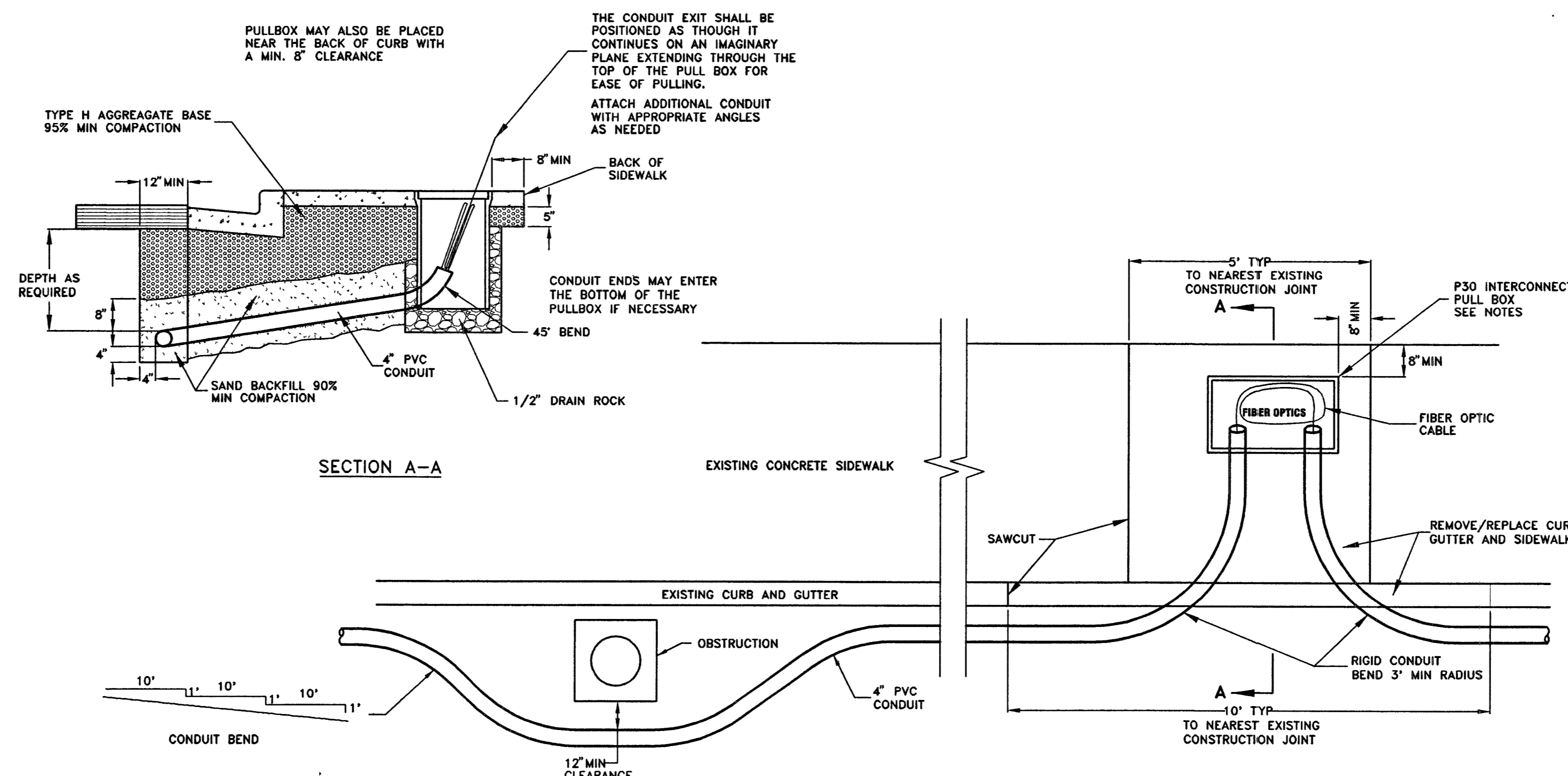
- CONSTRUCTION NOTES:**
- 41 TYPE 200 PULLBOX
  - 42 P30 PULLBOX
  - 54 4" INTERCONNECT CONDUIT W/ 72 STRAND FIBER OPTIC WIRE

- LVVWD NOTES:**
- WHEN A WATER LINE IS LESS THAN EIGHTEEN (18) INCHES ABOVE A SEWER OR STORM DRAIN LINE OR ANYTIME A WATER LINE IS BELOW A SEWER OR STORM DRAIN LINE THE FOLLOWING PROVISIONS SHALL APPLY:
- 1) A REASONABLE EFFORT MUST BE MADE TO PLACE WATER AND SEWER PIPELINE JOINTS AN EQUAL DISTANCE FROM THE CROSSING POINT. THIS REQUIREMENT DOES NOT APPLY TO WELDED JOINTS.
  - 2) A MINIMUM VERTICAL SEPARATION OF SIX (6) INCHES MUST BE MAINTAINED AND STRUCTURAL SUPPORT IN THE FORM OF A CEMENT SLURRY ENCASEMENT WHICH WILL EXTEND UPWARD FROM THE SEWER/STORM DRAIN LINE TO THE SPRINGLINE OF THE WATER LINE.
  - 3) THE CROSSING SHALL BE CONSTRUCTED USING ONE OF THE FOLLOWING OPTIONS:
    - a) THE SEWER LINE MUST BE CONSTRUCTED OF WATER SUPPLY QUALITY MATERIALS MEETING AWWA STANDARDS
    - b) THE SEWER OR WATER LINE SHALL BE TOTALLY ENCASED BY A MINIMUM FOUR (4) INCH THICK, 300 PSI CEMENT SLURRY, A DISTANCE OF TEN FEET ON EACH SIDE OF THE CROSSING MIDPOINT. THIS OPTION IS NOT AVAILABLE FOR ACP.
    - c) THE SEWER OR WATER LINE SHALL BE INSTALLED IN A SLEEVE OF WATER QUALITY PIPE OR STANDARD CASING, WITHOUT JOINTS, TEN FEET ON EACH SIDE.

- NOTES:**
- 1 P30 PULL BOXES SHALL BE INSTALLED FOR THE SIGNAL INTERCONNECT PER APPLICABLE STANDARDS.
  - 2 PULL BOX COVER SHALL BE INSCRIBED "FIBER OPTICS".
  - 3 LOCATIONS OF THE PROPOSED P30 INTERCONNECT PULL BOXES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING THE LOCATIONS IN THE FIELD AT APPROXIMATELY 500 FEET INTERVALS. THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER BEFORE INSTALLATION.
  - 4 DETAIL SHOWS METHOD OF INSTALLATION WHEN FIBER OPTIC CABLE IS REQUIRED.
  - 5 PULL BOX P30 TO INCLUDE 30' OF SLACK. (REQ.)
  - 6 PULL BOX TYPE 200 TO INCLUDE 60' OF SLACK. (REQ.)



2 INTERCONNECT CONDUIT & PULL BOX DETAIL (INSTALLED UNDER NEW SIDEWALK)  
 SCALE: 1" = 2'



1 INTERCONNECT CONDUIT & PULL BOX DETAIL (FOR EXISTING CURB & GUTTER)  
 SCALE: 1" = 2'

- NOTES:**
- 1 P30 PULL BOX SHALL BE INSTALLED FOR THE TRAFFIC SIGNAL INTERCONNECT PER APPLICABLE STANDARDS.
  - 2 PULL BOX COVER SHALL BE INSCRIBED "FIBER OPTICS".
  - 3 APPROXIMATE LOCATIONS OF THE PROPOSED P30 INTERCONNECT PULL BOXES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING THE LOCATIONS OF THE PROPOSED INTERCONNECT PULL BOXES IN THE FIELD AT APPROXIMATELY 500 FEET INTERVALS AND THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER BEFORE INSTALLATION.
  - 4 DETAIL SHOWS METHOD OF INSTALLATION WHEN FIBER OPTIC CABLE IS REQUIRED.

LVVWD *[Signature]* DATE 4/14/03

Call before you OVERHEAD  
 1-702-593-6111

Call before you Dig  
 1-800-227-2600

ALEXANDER ROAD  
 US 95 TO RANCHO DRIVE  
 UTILITY PLAN + DETAILS  
 STA. 89+00 TO STA. 99+00

TITLE: SHEET: U-1  
 19 of 35  
 DRAWING NO. 107-V3634

PROFESSIONAL ENGINEER-STATE OF NEVADA  
 MYRON R. WELSH  
 Exp. 06/30/04  
 No. 2646  
 4/14/03