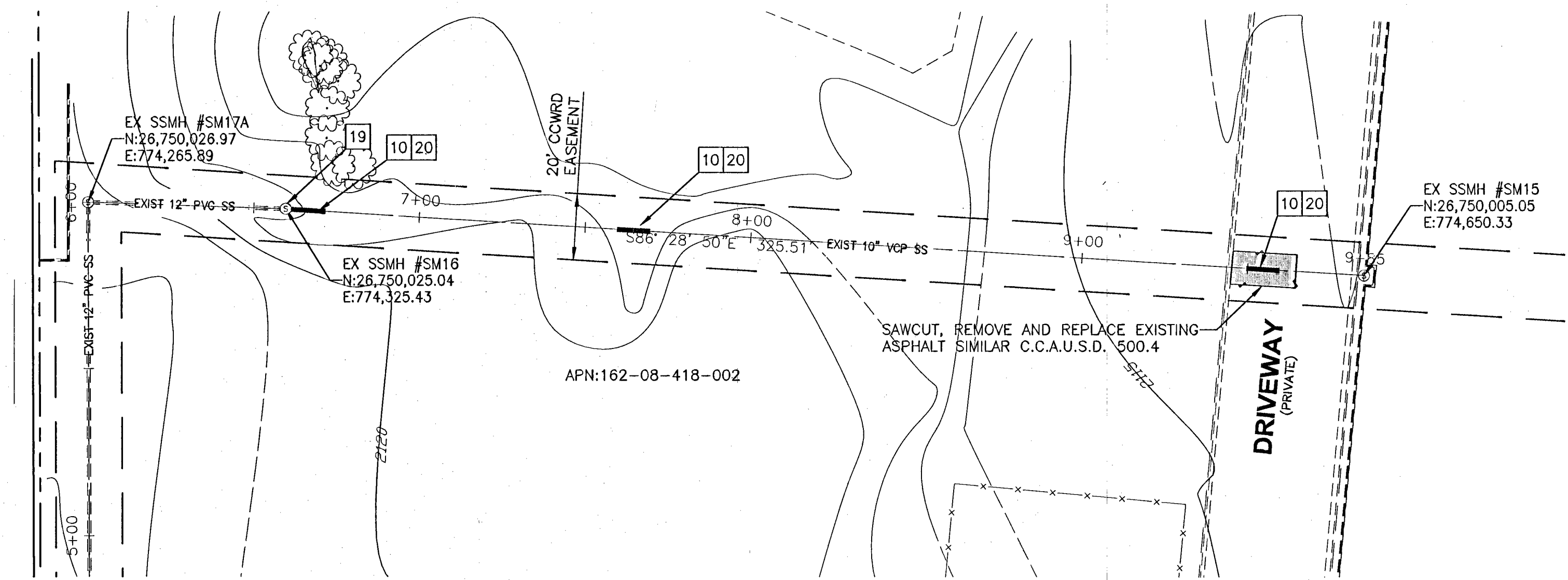
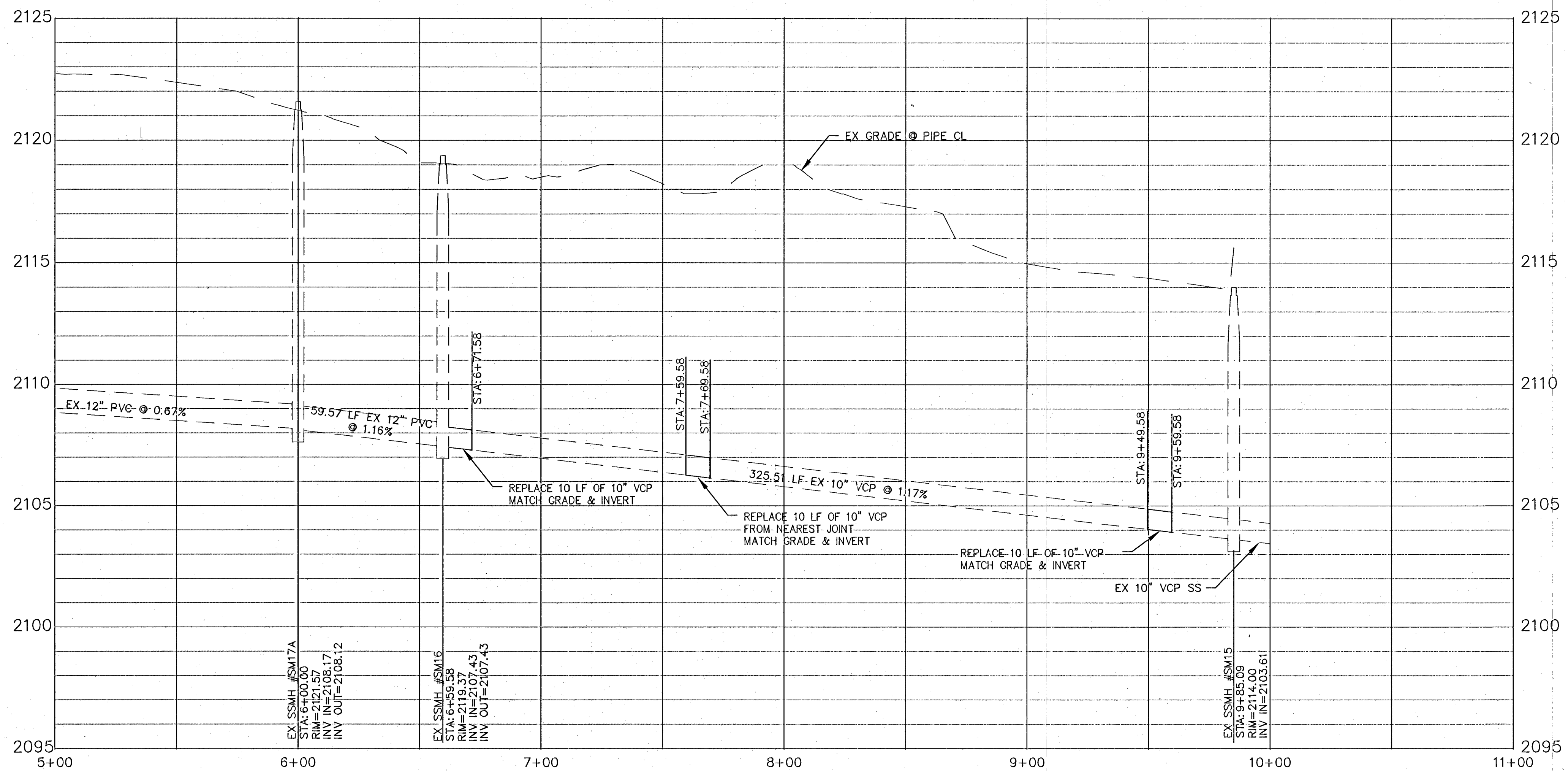
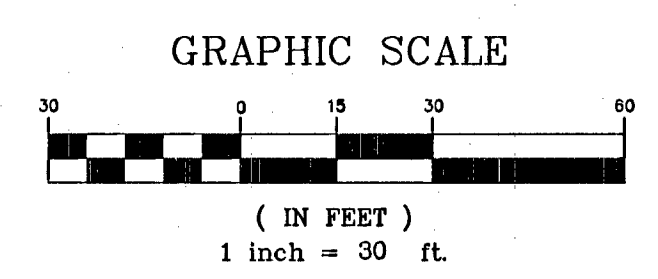




**SEWER REHABILITATION PLAN MH #SM16 TO MH #SM15**  
SCALE: 1" = 30'



**PROFILE MH #SM16 TO MH #SM15**  
SCALE: H: 1" = 30'  
V: 1" = 3'



**SANITARY SEWER CONSTRUCTION NOTES:**

1. INSTALL NEW 8" CIPP LINER IN EXISTING PIPE PER DETAIL 1 SHEET C2.10 AND SPEC SECT 33 01 36.
2. TRIM PROTRUDING LATERALS AND INSTALL SERVICE PROTECTION LINERS PER SPEC SECT 33 01 36.
3. NOT USED.
4. REMOVE MANHOLE STEPS AND GROUT HOLES.
5. ADD HIGH STRENGTH GROUT TO ANY VISIBLE AGGREGATE, CRACKS, GAPS AND REBAR.
6. INSTALL CORROSION COATING IN EXISTING 48-INCH MANHOLE PER SPEC. SECT. 09 96 03.
7. CONSTRUCT 48" DIA STANDARD MANHOLE PER D.C.S.W.C.S. DWG. No. SD-1A AND SPECIFICATIONS. INSTALL CONCRETE COLLARS AND LIDS PER SD-4 AND SD-2.
8. CONSTRUCT 60" DIA STANDARD MANHOLE PER D.C.S.W.C.S. DWG. No. SD-1A AND SPECIFICATIONS. INSTALL CONCRETE COLLARS AND LIDS PER SD-4 AND SD-2.
9. CONSTRUCT 72" DIA STANDARD MANHOLE PER D.C.S.W.C.S. DWG. No. SD-1A AND SPECIFICATIONS. INSTALL CONCRETE COLLARS AND LIDS PER SD-4 AND SD-2.
10. INSTALL 10" PVC SS PIPE PER D.C.S.W.C.S. DWG. No. SD-16(UNPAVED) SD-17(PAVED).
11. INSTALL 15" PVC SS PIPE PER D.C.S.W.C.S. DWG. No. SD-17.
12. INSTALL 8" PVC SS PIPE PER D.C.S.W.C.S. DWG. No. SD-17.
13. CONNECT SS LATERALS PER D.C.S.W.C.S. DWG. No. SD-22 & SD-23. EXTEND OR CUT LATERALS AS REQ.
14. ABANDON EXISTING SSMH PER D.C.S.W.C.S. SECTION 3.18.2a AND PIPE PER D.C.S.W.C.S. SECTION 3.18.1c.
15. REMOVE EXISTING MANHOLE PER D.C.S.W.C.S. SECTION 3.18.2c.
16. REMOVE AND REPLACE ACP WATERLINE WITH DUCTILE IRON PIPE PER SECTION D SHT. C3.20.
17. CONNECT TO EXISTING MANHOLE. RECONSTRUCT MANHOLE BOTTOM TO MATCH EXISTING AND PROPOSED INVERTS PER D.C.S.W.C.S. DWG No. SD-7.
18. PLUG NORTH PIPE OPENING. REMOVE SLIDE GATE AND CLEAN AND REFORM MANHOLE BOTTOM.
19. RECONSTRUCT MANHOLE BOTTOM TO MATCH EXISTING INVERTS PER D.C.S.W.C.S. DWG No. SD-7.
20. INSTALL COUPLINGS PER D.C.S.W.C.S. DWG No. SD-33.

**BENCHMARK:**

CITY OF LAS VEGAS, RIVET & PLATE TOP OF CURB SW CORNER SIRIUS AVE. & POLARIS AVE. 1LV11 65WS  
ELEVATION 649.268m - 2130.14 ft.

**BASIS OF BEARING:**

NORTH 70°33'24" WEST PER CLARK COUNTY PUBLIC WORKS, GEODETIC CONTROL POINTS 328 AND 819, NAD83, NEVADA EAST ZONE, POST HARN.

**Call before you Dig**  
Avoid cutting underground utility lines. It's costly.

**UnderGround**  
1-702-455-7511  
CLARK COUNTY PUBLIC WORKS  
1-702-455-7540  
1-702-432-5300

**Call before you Overhead**  
1-702-227-2929  
1-800-227-2600

| REV | DESCRIPTION | DATE | BY |
|-----|-------------|------|----|
|     |             |      |    |
|     |             |      |    |
|     |             |      |    |
|     |             |      |    |

**Nevada By Design**  
ENGINEERING CONSULTANTS  
5725 So. Sunhill Rd., Ste. B  
Las Vegas, NV 89130  
www.nvbydesign.com

|              |     |             |           |
|--------------|-----|-------------|-----------|
| DRAWN BY:    | DMS | SCALE:      | AS NOTED  |
| DESIGNED BY: | KEA | JOB NUMBER: | 13009     |
| CHECK BY:    | KEA | DATE:       | 3/21/2014 |

**PROJECT:** CCWRD PROJECT NO. 712 - LAS VEGAS VALLEY MANHOLE & PIPE REHABILITATION

**DRAWING TITLE:** MH #SM16 TO MH #SM15 PLAN AND PROFILE STA. 6+00 TO 10+00

**SEAL:**

**SHEET NO.:** C2.01

**SHEET 6 OF 18**

TH#52457  
CCWRD DWG. NO. 565-490

P:\Clark County Water Rehabilitation\Detech\13009\000-002-JF.dwg, May 12, 2014 - 3:30pm

|        |                   |               |                |                                       |     |              |          |           |     |              |            |         |                      |                      |                      |                      |                      |                 |                 |               |                |                |       |        |                 |       |
|--------|-------------------|---------------|----------------|---------------------------------------|-----|--------------|----------|-----------|-----|--------------|------------|---------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------|-----------------|---------------|----------------|----------------|-------|--------|-----------------|-------|
| LEGEND | CL OR SURVEY LINE | EASEMENT LINE | CONC. PWMT.    | MANHOLES & DESCRIPTIONS               | CAP | DESCRIPTION: | BO VALVE | CLEAN OUT | FDC | FIRE HYDRANT | GATE VALVE | REDUCER | 100W HPS STREETLIGHT | 150W HPS STREETLIGHT | 200W HPS STREETLIGHT | 250W HPS STREETLIGHT | 400W HPS STREETLIGHT | 5' CONTOUR LINE | 1' CONTOUR LINE | EDGE OF PWMT. | "A" TYPE CURBS | "L" TYPE CURBS | WALLS | FENCES | SPOT ELEVATIONS | SIGNS |
|        | PROPERTY LINE     | SAWCUT LINE   | LIGHT AC PWMT. | ③ = SANITARY SEWER<br>④ = STORM DRAIN |     | EXISTING:    | ⊥        | •         | ⊙   | ⊙            | ⊙          | ▷       | ⊖                    | ⊖                    | ⊖                    | ⊖                    | ⊖                    | ---(2210)---    | ---2211---      | ---(12.34)--- | ---            | ---            | ---   | ---    | ---             |       |
|        | ROW LINE          | SCARP LINE    | HEAVY AC PWMT. | ② = STORM DRAIN<br>① = TELEPHONE      | [   | PROPOSED:    | ⊥        | •         | ⊙   | ⊙            | ⊙          | ▷       | ⊖                    | ⊖                    | ⊖                    | ⊖                    | ⊖                    | ---2210---      | ---2211---      | ---           | ---            | ---            | ---   | ---    | ---             |       |