

SANITARY SEWER MANHOLE SCHEDULE

MH #	STREET NAME	STATION & OFFSET	INV IN	INV OUT	INV IN (Lot)	RIM	NORTHING	EASTING	MH #
1	FAR HILLS AVE.	225+05.88, 29.00, LT	3447.02	3446.82	N/A	3457.0±	565837.5759	521664.8552	1
1A	FAR HILLS AVE.	223+39.00, 48.68, RT	3443.97	3443.82	N/A	3451.4±	566015.8119	521710.8421	1A
2	FAR HILLS AVE.	228+23.92, 22.14' LT	3465.15	3464.95	N/A	3479.6±	565526.1005	521729.5304	2
3	FAR HILLS AVE.	231+41.97, 15.28' LT	3483.42	3483.50	3483.70 (12")	3504.3±	565214.6252	521794.2055	3
3A	FAR HILLS AVE.	231+41.97, 52.00 RT	3485.46	3485.34	N/A	3505.5±	565226.8813	521860.3637	3A
4	FAR HILLS AVE.	233+89.09, 14.81' LT	3504.79	3504.73	N/A	3523.3±	564971.7256	521839.6874	4
5	FAR HILLS AVE.	236+36.21, 14.33' LT	3519.18	3518.98	N/A	3541.3±	564728.8261	521885.1693	5
6	FAR HILLS AVE.	238+36.93, 14.33' LT	3529.42	3529.22	N/A	3551.1±	564533.3688	521940.1927	6
7	FAR HILLS AVE.	241+89.10, 14.33' LT	3536.90	3537.02	3537.27 (12")	3561.4±	564204.4784	522066.1127	7

SEWER QUANTITIES (PUBLIC)

48" SANITARY MANHOLE 7 EA.
 60" SANITARY MANHOLE 2 EA.
 8" SDR 35 88 LF
 12" C-900 1950 LF

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF SUCH INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERROR OR OMISSION WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

NOTE:
 ORIGINAL DESIGN DRAWINGS
 SIGNED BY:
 JOSH JOHNSON, P.E.

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 CALL BEFORE YOU DO OVERHEAD

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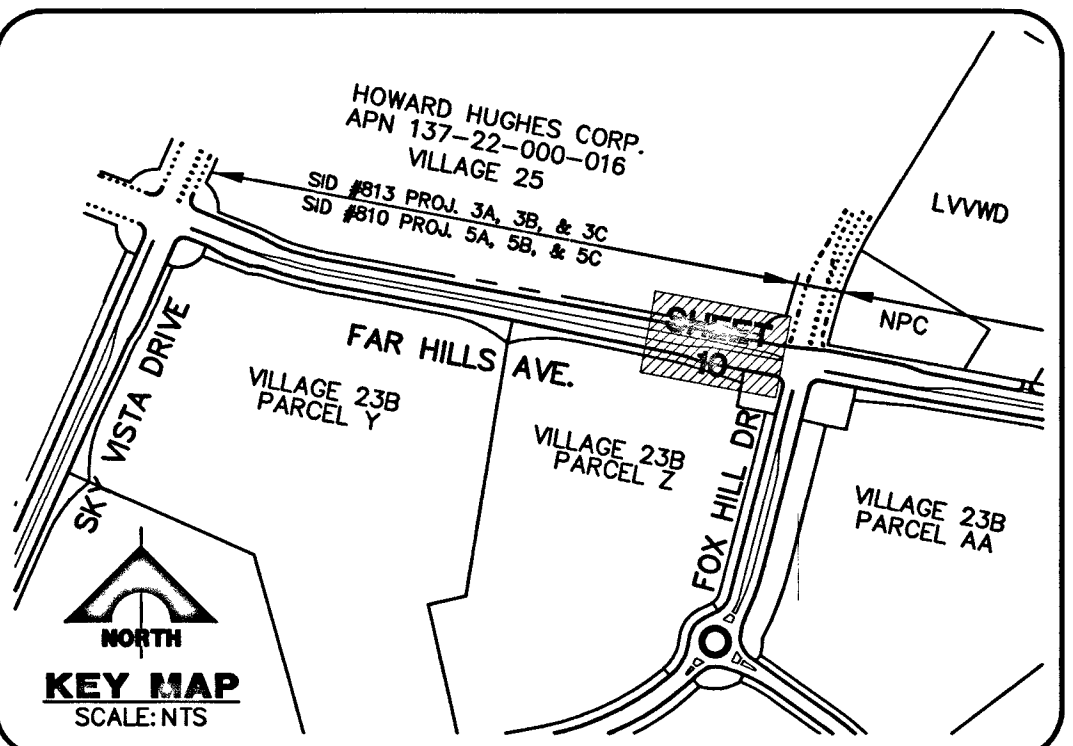
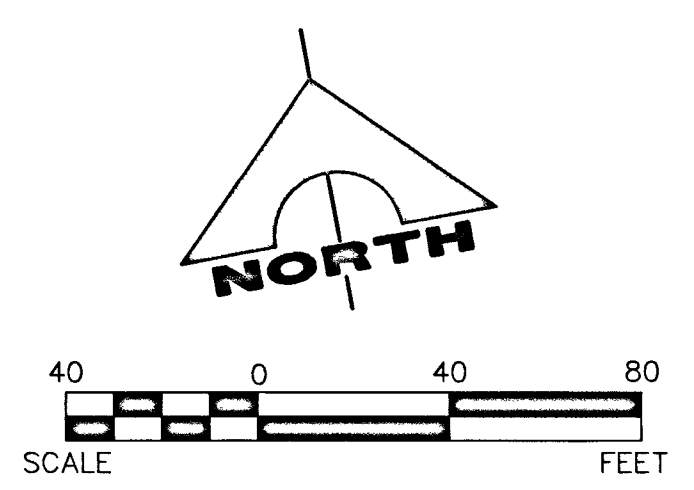
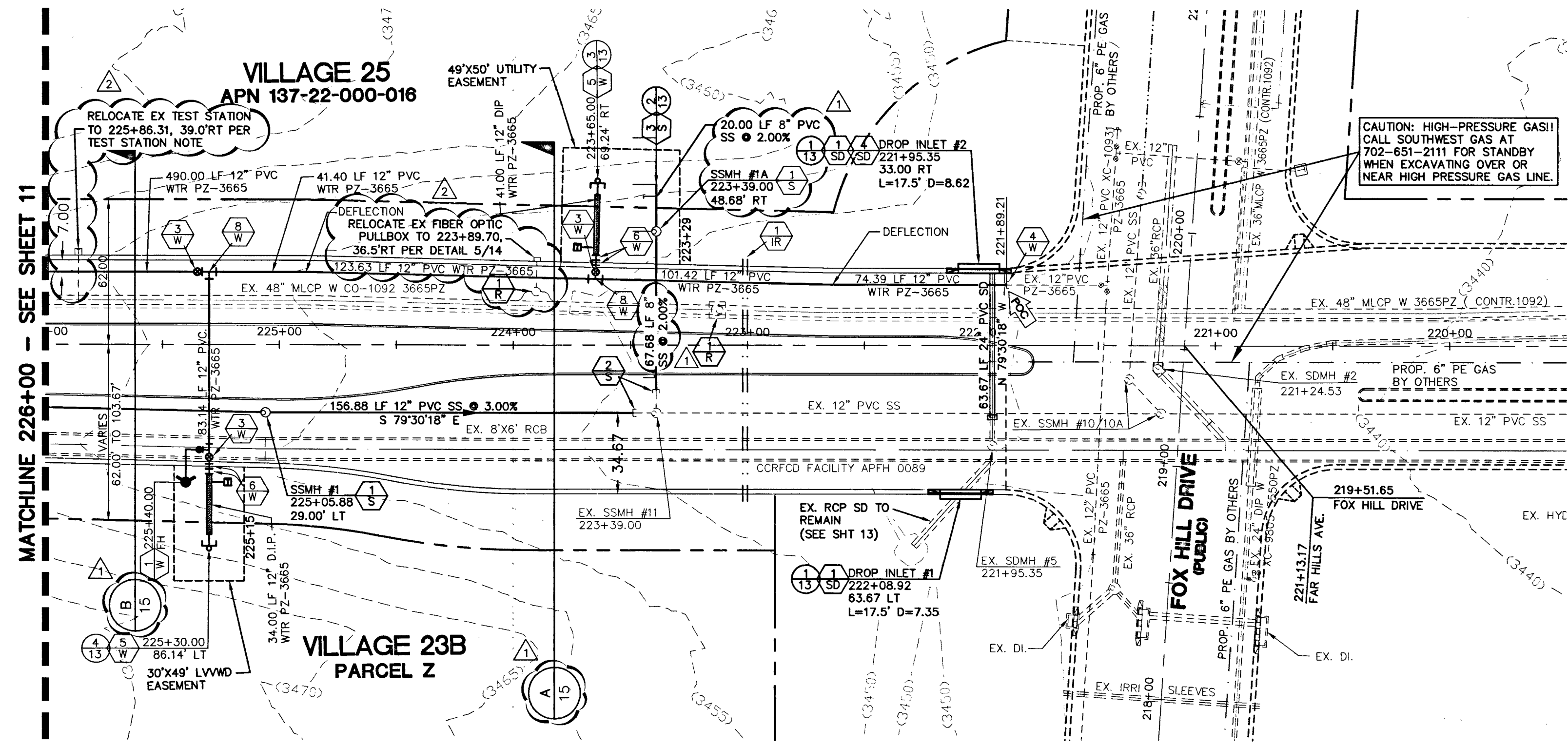
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 DRAWN: PB
 CHECK: MF/JJ
 ISSUE DATE: 08/03/2010
 PLOT TIME: 15:09:22

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THE HOWARD HUGHES COMPANY, LLC
 VILLAGE 23B FAR HILLS AVENUE IMPROVEMENTS - PHASE II
MASTER UTILITY PLAN - SEWER

DRAWING
6
 H NO. 53053 CLV DRAWING NO. 107V6128-2 6 OF 20 SHEETS

DATE: 08/03/2010
 DATE LAGEN_APP DATE: 08/03/2010
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 DESCRIPTION: VILLAGE 23B FAR HILLS AVENUE IMPROVEMENTS - PHASE II
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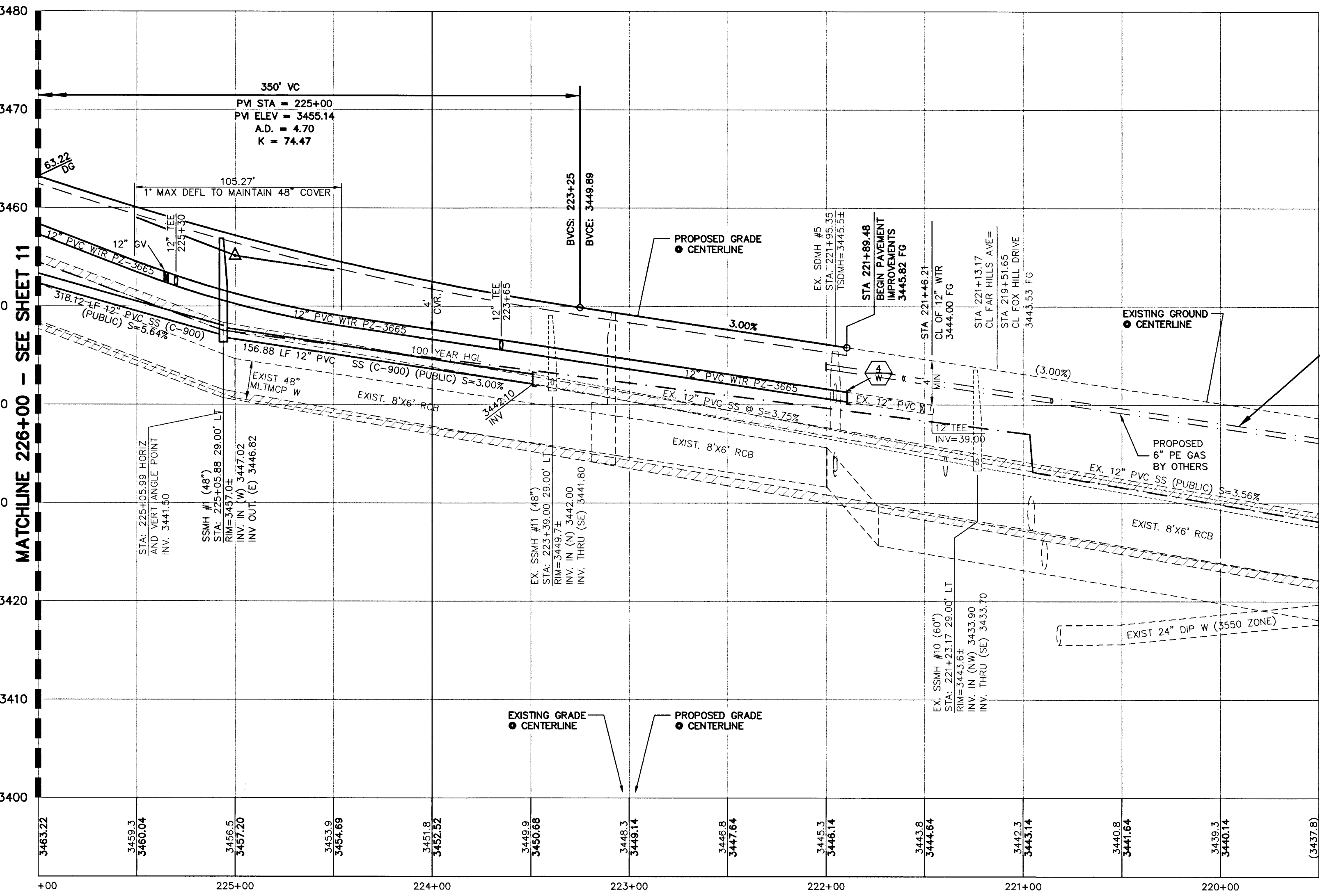


FAR HILLS AVENUE (PUBLIC) SID #810 PROJECTS 5A, 5B AND 5C

SCALE: HORIZ. 1" = 40' VERT. 1" = 8'

CONTRACTOR NOTE:
 ALL EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND RELOCATE THESE UTILITIES AS NECESSARY. NO REPRESENTATION IS MADE THAT ALL UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO LIABILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS.

DEPTH OF COVER:
 MINIMUM 24" COVER PER UDACS SECTION 2.08.04 - GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.



CAUTION: PROPOSED HIGH PRESSURE GAS LINE!! LOCATION PRELIMINARY.

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 NOTE: ORIGINAL DESIGN DRAWINGS SIGNED BY: JOSH JOHNSON, P.E.

TEST STATION NOTE: PROCEDURES TO RELOCATE A CORROSION TEST STATION:

1. EXPOSE THE TEST STATION(S) AND LABEL ALL LEADS ACCORDING TO THE TYPICAL TEST BOARD DETAIL.
2. THE LEADS THAT ARE CONNECTED TO THE PIPE REQUIRE #6 COPPER WIRE WITH A HMWPE JACKET SUCH AS RAYCHEM PERMARAD.
3. THE LEAD THAT IS CONNECTED TO THE REFERENCE CELL REQUIRES #14 COPPER WIRE WITH A HMWPE JACKET SUCH AS RAYCHEM PERMARAD.
4. CONNECT THE TWO WIRES TO BE SPLICED WITH A COPPER BUTT CONNECTION USING THE PROPER CRIMPING TOOL.
5. MAKE EACH SPlice USING A SCOTCHCAST RESIN SPLICING KIT, DURO-CAST UNIVERSAL SPlice KIT, OR A RAYCHEM ANODE SPlice ENCAPSULATION KIT.
6. RECONNECT THE TEST BOARD TO PROPER LEADS, AND PLACE THE TEST BOX AT THE NEW SITE.
7. THE TEST BOX AT THE NEW SITE WILL BE INSTALLED ACCORDING TO THE TYPICAL TEST BOX DETAIL.
8. ALL TEST LEADS AND ANODE LEADS INSIDE THE TEST BOX SHALL BE BUNDLED TOGETHER AT 8 INCH INTERVALS WITH NYLON TIES AND SHALL BE PROVIDED WITH A MINIMUM OF 4 FEET OF SLACK.
9. ALL TEST LEADS AND ANODE LEADS SHALL BE COLOR CODED WITH COLORED TAPE AT EACH END, AND AT 4 FEET INTERVALS.
10. RELOCATED TEST STATION TO BE TESTED BY CERTIFIED CATHODIC PROTECTION SPECIALIST, CORROSION SPECIALIST, OR REGISTERED PROFESSIONAL CORROSION ENGINEER. RESULTS TO BE SUBMITTED IN WRITING TO LVVWD CONSTRUCTION DIVISION.

CONSTRUCTION NOTES

WATER

- 1. INSTALL FIRE HYDRANT ASSEMBLY (40) UDACS
- 2. NOT USED
- 3. INSTALL 12" GATE VALVE & BOX WITH 1' RADIUS CONCRETE COLLAR (30) UDACS
- 4. REMOVE CAP & B.O. AND CONNECT TO EXISTING WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING WATER LINE) (36) UDACS
- 5. INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY (36) UDACS
- 6. INSTALL (VERTICAL) 45° BEND (31) UDACS
- 7. INSTALL 90° BEND (31) UDACS
- 8. INSTALL 12"x12" TEE (31) UDACS

SEWER

- 1. INSTALL 48" DIA. SEWER MANHOLE (SD 1-8) DCWSCS
- 2. INSTALL 60" DIA. SEWER MANHOLE (SD 1-8) DCWSCS
- 3. REMOVE EX. PLUG & CONNECT TO EX. SEWER LINE (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING SEWER LINE PRIOR TO CONSTRUCTION)
- 4. INSTALL TEMPORARY PLUG AND CAP

STORM DRAIN

- 1. INSTALL TYPE "CM2" DROP INLET (4121) USD (421) USD (TC NOTED IS FROM CL OF BOX)
- 2. CONNECT TO EXISTING STORM DRAIN LINE (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE)
- 3. INSTALL TEMPORARY PLUG AND CAP
- 4. CAST-IN-PLACE MONOLITHIC POUR WITH WATER STOP BETWEEN SLAB AND WALLS. BASE, WALLS AND TOP TO BE CONSTRUCTED WITH MECHANICAL WATER STOPS, CENTER BULB OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

IRRIGATION

- 1. BANK "A" : 1-6" AND 2-4" SCHD. 40 PVC (U-18) SIS
- 2. BANK "B" : 2-4" SCHD. 40 PVC (U-18) SIS

ROADWAY

- 1. VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS AND ADJUST TO GRADE. WATER VALVES ARE TO REMAIN ACCESSIBLE AT ALL TIMES.

NOTES:

- 1.) SEE MASTER UTILITY PLAN - WATER (SHEET 4) FOR QUANTITIES
- 2.) RESTRAINED JOINTS REQUIRED FROM: STA: 221+90 TO 223+20 & STA: 224+01 TO 226+61

BASIS OF BEARINGS

NORTH 89°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA

BENCHMARK

BM #	DESC.	NAVD 88 DATUM (FEET)	NAVD 88 DATUM (METERS)
CLV BM No. 0368 3	U.S.C. & G.S. BRASS DISC SET IN ROCK ON THE EAST SIDE OF CHARLESTON BOULEVARD AND SOUTH OF THE RED ROCK DETENTION BASIN.	3246.71	989.599

APPROVED FOR CONSTRUCTION 1ST APP'D 6/24/14

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 PROJECT NO. 122713 DATE:

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

Call 811

1-800-227-2600
 CLARK COUNTY TRAFFIC OPERATIONS
 1-702-455-7544

CALL BEFORE OVERHEAD

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

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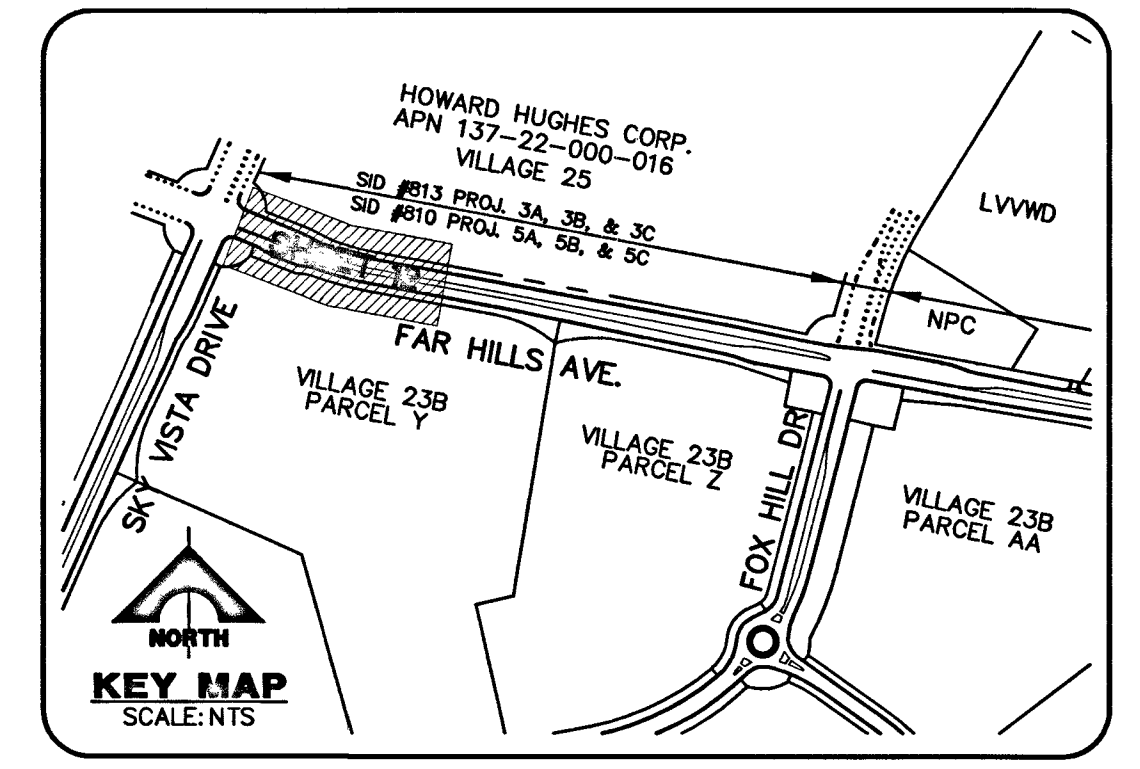
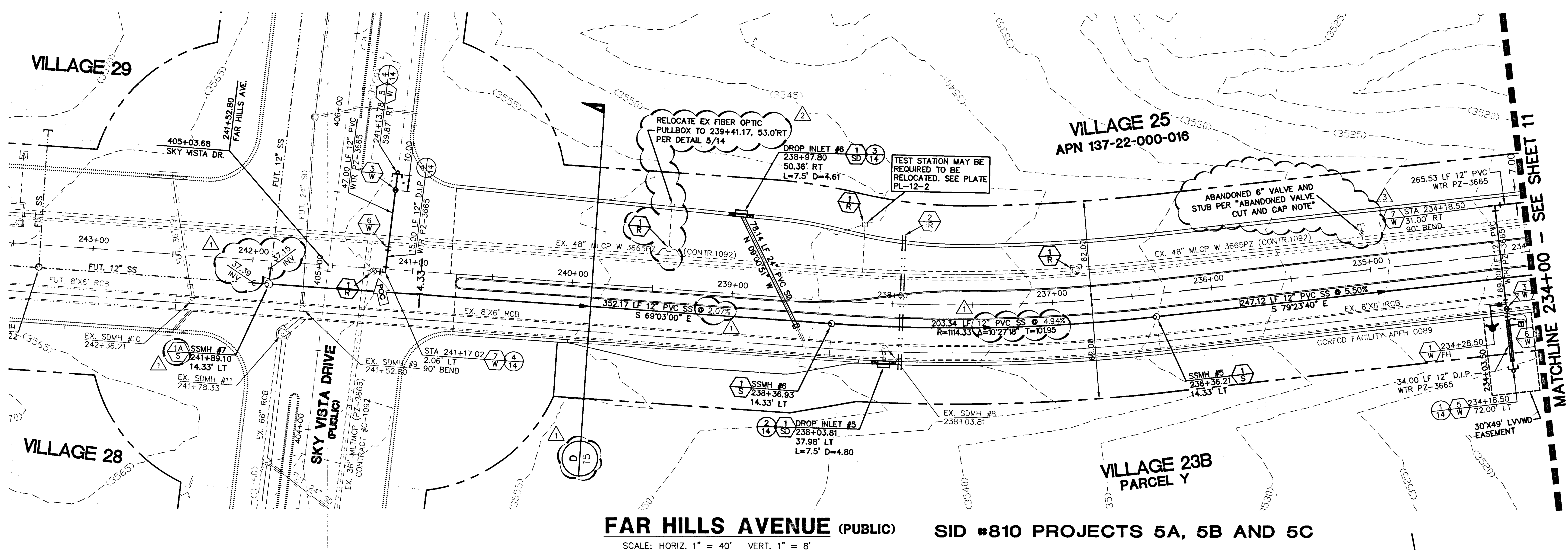
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THE HOWARD HUGHES COMPANY, LLC
 VILLAGE 23B FAR HILLS AVENUE IMPROVEMENTS - PHASE II
 FAR HILLS AVENUE - UTILITY PLAN AND PROFILE
 STA: 219+60 TO 226+00

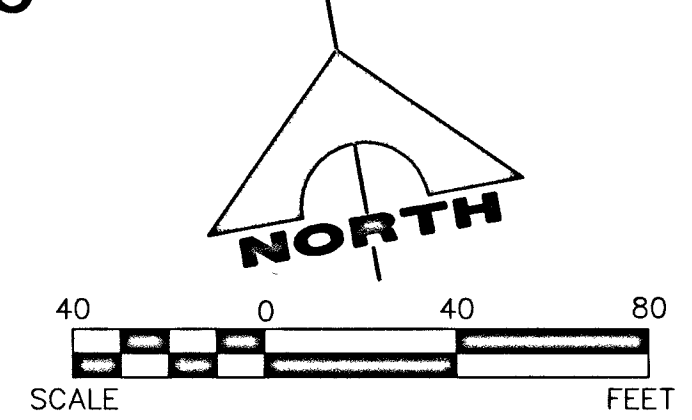


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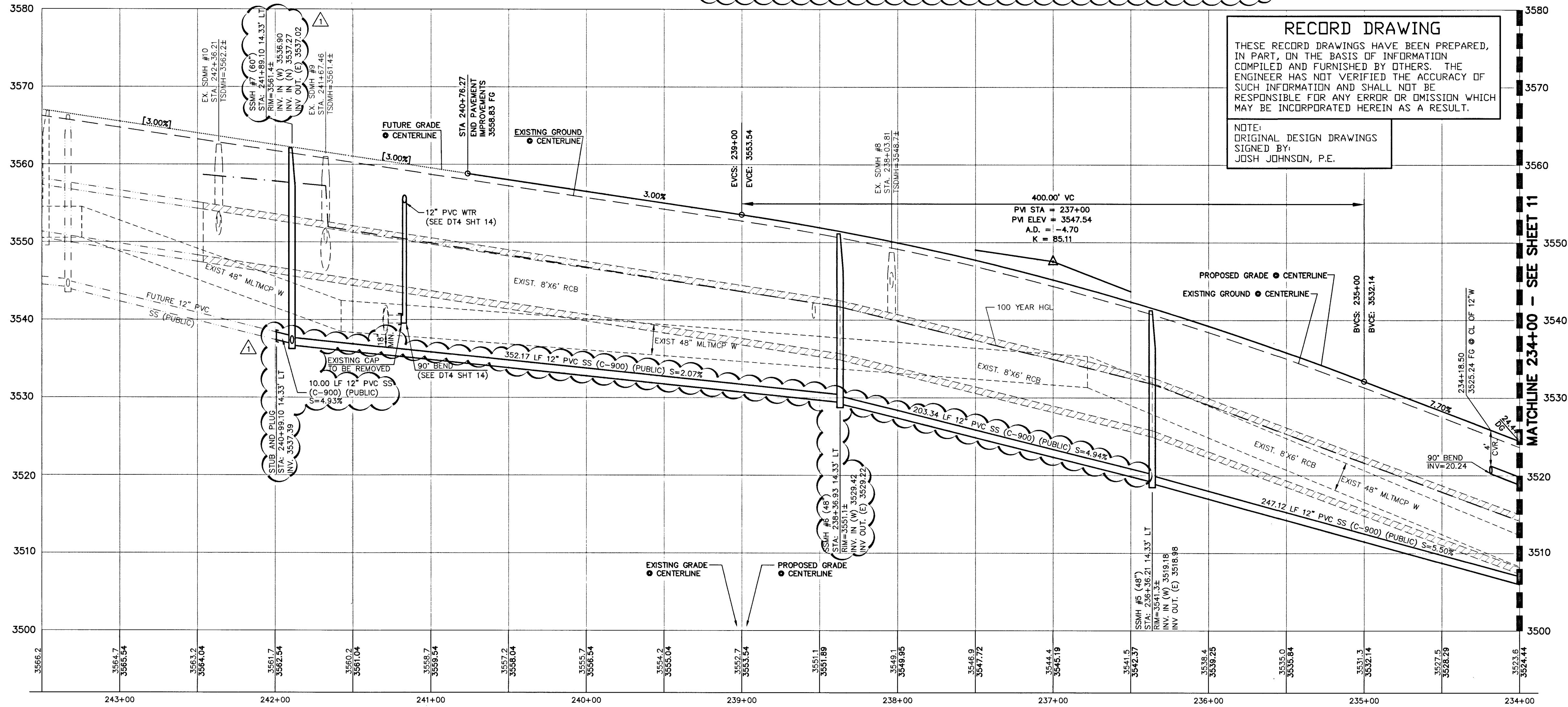
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DEPTH OF COVER:
 MINIMUM 24" COVER PER UDACS SECTION 2.03.04 - GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

ABANDONED VALVE CUT AND CAP
 ALL VALVES TO BE ABANDONED SHALL BE IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP 24-INCHES OF THE VALVE BOX, AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF 8-INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF 2,000 PSI. THE LATERAL MUST BE CUT WITHIN ONE FOOT OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE CONTRACTOR SHALL CUT THE EXISTING PIPE WHERE SHOWN ON THE DRAWING AND INSTALL A CAP COMPLETE WITH A THRUST BLOCK. WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS, THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH DISTRICT APPROVAL. A CONCRETE THRUST BLOCK SHALL BE INSTALLED AT ALL CAP OR PLUG LOCATIONS IN ACCORDANCE WITH THE PROVISIONS OF UDACS PLATE 31.
 REVISED 11/02/11



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NOTES:
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 2.) RESTRAINED JOINTS REQUIRED FROM: STA: 233+75.50 TO 234+18.50

BASIS OF BEARINGS
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FAST
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DATE: _____
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 DRAWN BY: _____
 CHECKED BY: _____
 ISSUE DATE: _____
 ISSUE EDITOR: _____
 PLOT TIME: 15:10:14
 DESCRIPTION: _____

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THE HOWARD HUGHES COMPANY, LLC
 VILLAGE 28B FAR HILLS AVENUE IMPROVEMENTS - PHASE II
 FAR HILLS AVENUE - UTILITY PLAN AND PROFILE
 STA. 234+00 TO 242+50

DRAWING
12
 H NO. 53053 CLV DRAWING NO. 107V6128-2
 12 OF 20 SHEETS
 JOB NO. 62023B-208

