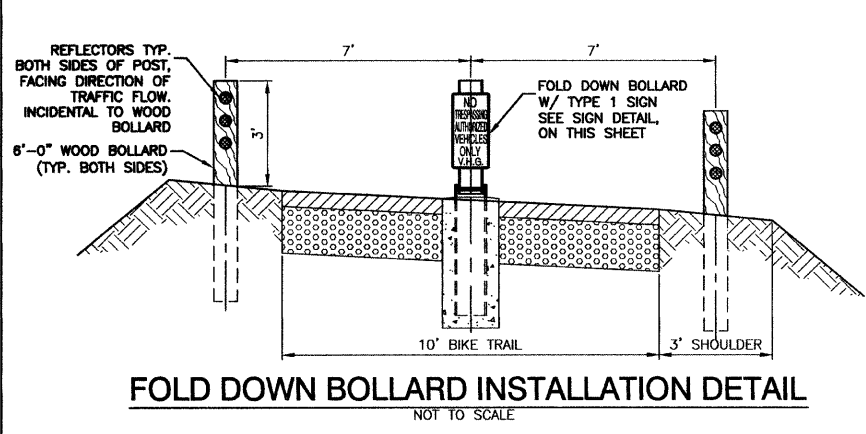
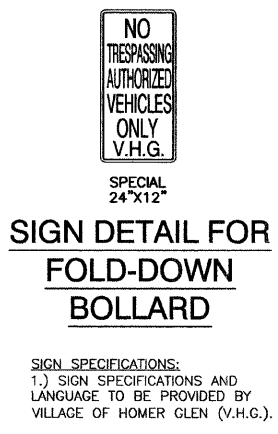


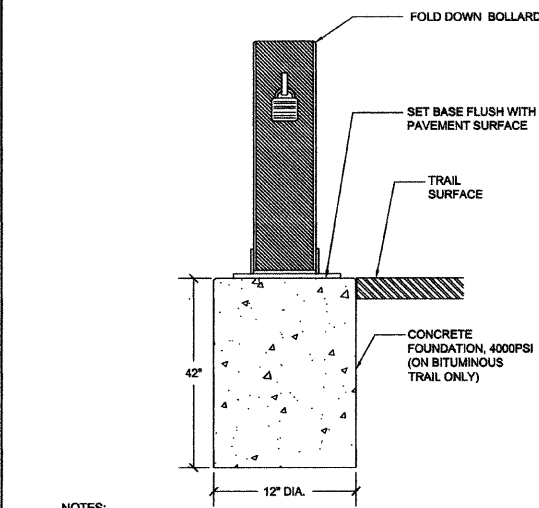
CONTRACT #63440



FOLD DOWN BOLLARD INSTALLATION DETAIL
NOT TO SCALE



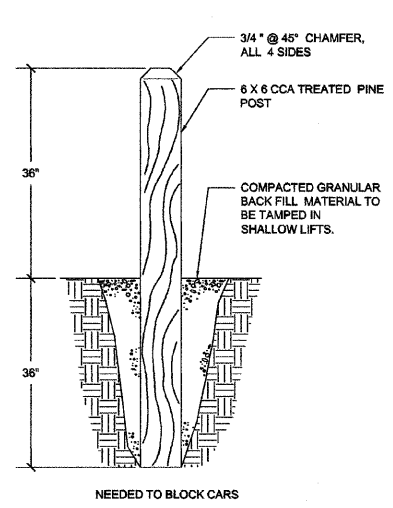
SIGN DETAIL FOR FOLD-DOWN BOLLARD



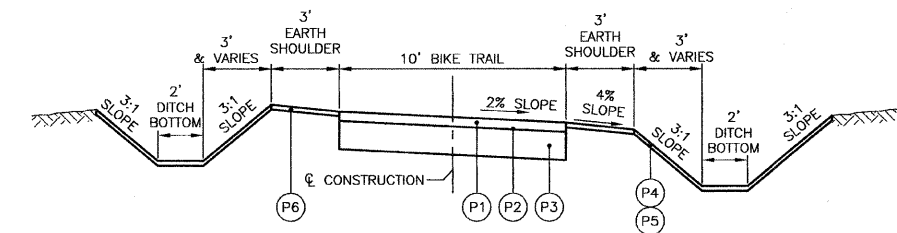
FOLD DOWN BOLLARD
NOT TO SCALE

BOLLARDS

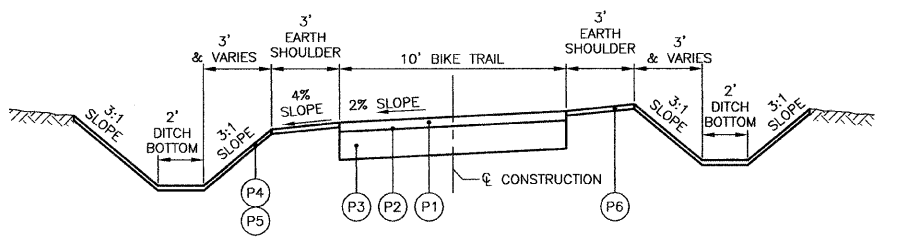
AS REQUIRED BY FPDWC IN ACCORDANCE WITH FPDWC STANDARDS.



WOOD BOLLARD
NOT TO SCALE



LEFT TO RIGHT SLOPE:
Sta. 53+15 to Sta. 80+50
Sta. 9+53.83 to Sta. 9+87.53
Sta. 100+12.14 to Sta. 119+29.23
Sta. 128+61 to Sta. 145+00
Sta. 160+28.67 to Sta. 178+34
Sta. 207+67.18 to Sta. 211+17
Sta. 234+40 to Sta. 256+00
Sta. 271+50 to Sta. 280+22.21



RIGHT TO LEFT SLOPE:
Sta. 95+73 to Sta. 99+53.83
Sta. 119+29.33 to Sta. 128+61
Sta. 145+00 to Sta. 156+18.38
Sta. 211+17 to Sta. 234+40
Sta. 256+00 to Sta. 271+50

BIKE TRAIL TYPICAL SECTIONS
NOT TO SCALE

LEGEND

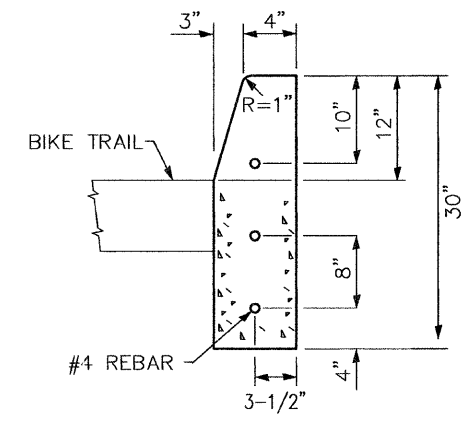
- (P1) HMA SURFACE COURSE, MIX "C", N50, 2"
- (P2) BITUMINOUS MATERIAL - PRIME COAT
- (P3) AGGREGATE BASE COURSE, 8"
- (P4) FURNISHING AND PLACING TOPSOIL, 4"
- (P5) SEEDING, CLASS 2A
- (P6) SODDING, (SALT TOLERANT) - SEE PLANS FOR LOCATION

EARTHWORK QUANTITIES

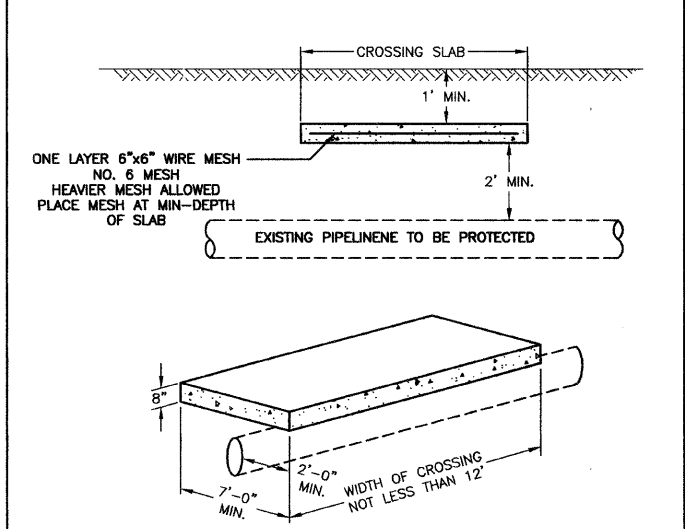
- TOTAL CUT = 17,665 CY
- TOTAL TOPSOIL = 9,508 CY
- TOTAL AVAILABLE CUT TO FILL = 8,157 CY
- TOTAL STRUCTURAL FILL . . . = 6,652 CY
- TOTAL NON-STRUCTURAL FILL = 8,523 CY

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5mm), 2"	4% @ 50 Gyr.

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD./IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

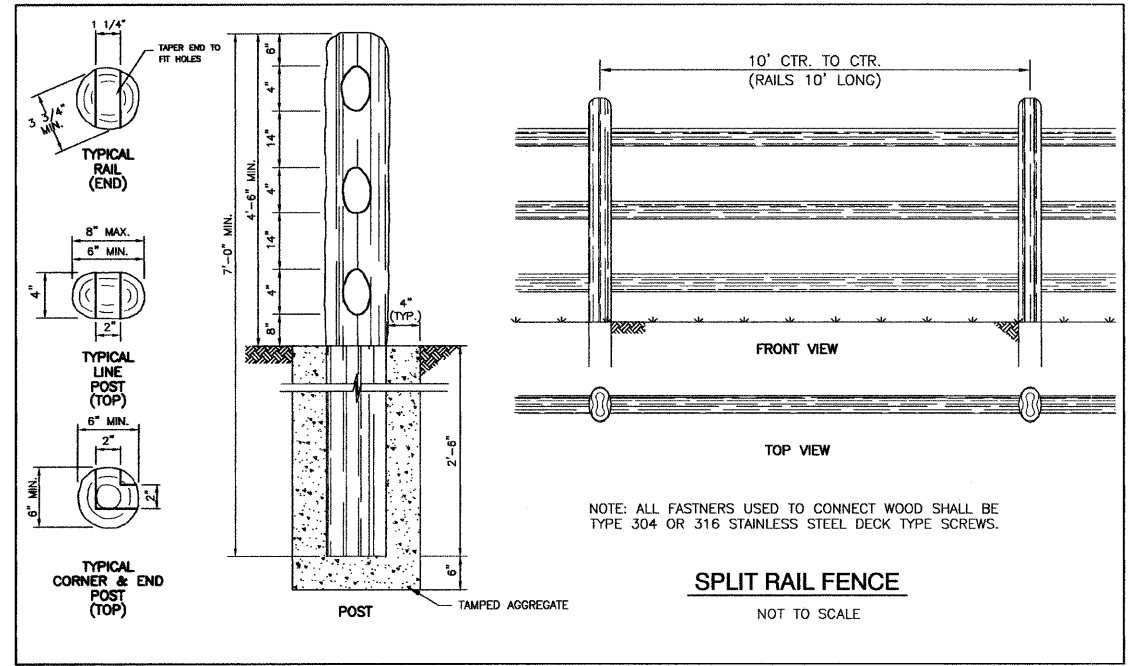


CONCRETE CURB, TYPE B (SPECIAL)
NOT TO SCALE



- NOTES:**
- CONCRETE SLAB TO BE A MINIMUM OF 2 FEET ABOVE PIPE, 7' WIDE, 8" IN DEPTH, AND A LENGTH OF EQUAL TO CROSSING WIDTH.
 - CAST CONCRETE SLAB A MINIMUM OF 7 DAYS IN ADVANCE OF CONSTRUCTION WITH 3000 PSI CONCRETE.
 - CONCRETE MAY BE EARTH FORMED.
 - PROVIDE TEMPORARY FENCING FOR INDICATING CROSSING LOCATION.
 - PREVENT CROSSING OF PIPELINE AT ALL OTHER LOCATIONS.
 - MAXIMUM LOADING: 15,000 LB. WHEEL LOAD.

CONCRETE PAD PIPELINE PROTECTION DETAIL
NOT TO SCALE



NOTE: ALL FASTNERS USED TO CONNECT WOOD SHALL BE TYPE 304 OR 316 STAINLESS STEEL DECK TYPE SCREWS.

SPLIT RAIL FENCE
NOT TO SCALE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

HOMER GLEN GMAO COMMUNITY BIKE TRAIL AND EAST EXTENSION TYPICAL CROSS SECTION & CONSTRUCTION DETAILS

SCALE: VERT. N/A
HORIZ. 1=1

DATE: FEBRUARY 2, 2010

DRAWN BY: JJB
CHECKED BY: BDB

ROBINSON ENGINEERING, LTD.
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ILLINOIS DESIGN FIRM REGISTRATION NO. 15400128