

6

OLD COLUMBIA ROAD N549250 PROP 8' WATER N547750

TYPE OF BUILDING: N.A. NUMBER OF PARCELS: 0 WATER HOUSE CONNECTIONS: 0

WATER CODE FOR COUNTY USE ONLY: WATER No: E16

HO. CO. SURVEY CONTROL

BENCH MARK

VICINITY MAP SCALE: 1"=600'

HOWARD COUNTY GEODETIC SURVEY CONTROL NAD83(91) (HORIZONTAL) NGVD29 (VERTICAL)

NO. 42R1 N 547820.221 (NAD83/91) E 1351171.574 (NAD83/91) **ELEVATION 376.541 (NGVD29)**

NO. 42R2 N 546946.783 (NAD83/91) E 1352118.584 (NAD83/91) ELEVATION 332.166 (NGVD29)

BM #1 N 549025.1090 E 1351715.3470 ELEVATION 312.705 SE CORNER INLET

N 549475.2940 E 1351967.0270 ELEVATION 324.255 SW CORNER OF CONCRETE PAD

GENERAL NOTES

- 1. APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE. 2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES, NAD 83.
- 3. ALL VERTICAL CONTROLS ARE BASED ON NAVD 29.
- 4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- 5. CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF
- 6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- 7. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL ET AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- 8. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

1-800-526-2000 BG&E (CONTRACTOR SERVICES). 850-4620 BG&E - UNDERGROUND DAMAGE CONTROL 787-9068 BUREAU OF UTILITIES (DPW). 313-4900 BELL ATLANTIC MARYLAND 1-800-621-9900 COLONIAL PIPELINE CO. . 795-1390 MISS UTILITY 1-800-257-7777 STATE HIGHWAY ADMINISTRATION

9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR

10. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN

- 11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD
- 12. ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- 13. TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- 14. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- 15. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- 16. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS, SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM. CONTRACTOR TO COORDINATE TIE-IN TO EXISTING WATER MAIN FIVE (5) WORKING DAYS PRIOR TO SCHEDULING; COORDINATE WITH THE ENGINEER AND THE BUREAU OF UTILITIES. THE CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR NOTIFICATION FOR TIE-IN TO AFFECTED CUSTOMERS.

EDEN BROOK DRIVE WATER EXTENSION

CAPITAL PROJECT No. W-8233 CONTRACT No. 44-3851 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND

SHEET

SCALE

AS SHOWN

STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 24 HOURS MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS, PRIDE TO THE START OF ANY CONSTRUCTION (410-313-1855).
- 1. ALL VEGETATIVE AND STRUCTURAL PRACTICES PRACTICES ARE TO BE INSTALLED TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1. b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I. CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (Sec. 51), SOD(Sec. 52), TEMPORARY SEEDING (Sec. 50) AND MULCHING (Sec. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7. SITE ANALYSIS:
- TOTAL AREA OF SITE AREA DISTURBED
- AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED TOTAL CUT
- 0.07 ACRES __ CU. YDS. NA CU. YDS. TOTAL FILL
- OFFSITE WASTE/BORROW AREA LOCATION NA
- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF THE DISTURBANCE.

0.009 ACRES

- 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED. IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- 12. CONTRACTOR SHALL PLACE EXCAVATED MATERIALS ON UPHILL SIDE OF TRENCH AND PLACE SILT FENCE ON DOWNHILL SIDE OF TRENCH.

NOTE: SEDIMENT CONTROL TO BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARDS AND SPECIFICATIONS (VOL.IV) OF THE HOWARD COUNTY DESIGN MANUAL AND THIS PLAN.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING. APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT.).

2) ACCEPTABLE -- APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

FDR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. DN SLOPES B FEET OR

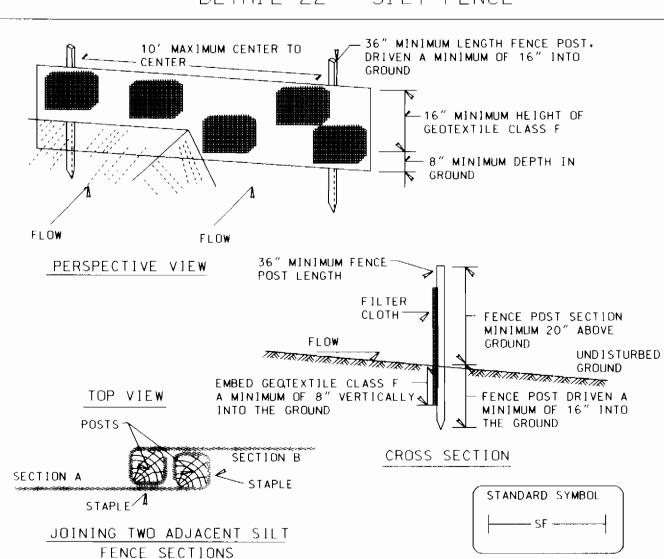
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER 15 NEEDED.

<u>SEEDBED PREPARATIO</u>N: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

MULCHING: - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSIDN AND

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be $1\frac{1}{2}$ " x $1\frac{1}{2}$ " square (minimum) cut, or $1\frac{3}{4}$ " diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength Test: MSMT 509 50 lbs/in (min.) Test: MSMT 509 Tensile Modulus 20 lbs/in (min.) 0.3 gal ft²/ minute (max.) Test: MSMT 322 Filtering Efficiency 75% (min.) Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped. folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 15 - 3 WATER MANAGEMENT ADMINISTRATION

SILT FENCE

Construction Specifications

- 1. A detail of the silt fence shall be shown on the plan, and
- contain the following minimum requirements: a. The type, size, and spacing of fence posts.
- b. The type of filter cloth used.
- c. The method of fastening the filter cloth to the fencing
- d. Accumulated sediment must be removed when it reaches 50% of the height of the fabric.
- 2. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- 3. Design computations are not required.
- 4. All silt fences shall be placed as close to the contour as possible.
- 5. The area below the fence must be undisturbed or stabilized.
- 6. Silt Fence Fabric: The fabric shall meet the Filter fabric specifications listed in Table 27.
- 7. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts, 2"x 2", with a minimum cross sectional area of 3.0 square inches will be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot.

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT E - 15 - 3A | WATER MANAGEMENT ADMINISTRATION

> DES: CC DRN: GJ CHK: TW DATE: 1/01 600' SCALE TAX MAP NO. 37 PARCEL 073

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

DETAIL 33 - SUPER SILT FENCE

10' MAXIMUM

CHAIN LINK FENCE

WITH 1 LAYER OF

33" MINIMUM

FILTER CLOTH

118/18/18/18

Construction Specifications

latest Maryland State Highway (SHA) Details for Chain Link Fencing. The

(SHA) specification for a 6 foot fence shall be used, substituting 42 inch

3. Chain link fence shall be fastened securely to the fence posts with wire

4. Filter cloth shall be fastened securely to the chain link fence with ties

6. When two sections of geotextile fabric adjoin each other, they shall be

7. Maintenance shall be performed as needed and silt buildups removed when

"bulges" develop in the silt fence, or when silt reaches 50% of fence height

ties or staples. The lower tension wire, brace and truss rods, drive

5. Filter cloth shall be embedded a minimum of 8" into the ground.

anchors and post caps are not required except on the ends of the fence.

1. Fencing shall be 42 inches in height and constructed in accordance with the

33" MINIMUM

7/8/18/18

36" MINIMUM

- 8" MINIMUM

STANDARD SYMBOL

----- SSF ---

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

FLOW

NOTE: FENCE POST SPACING

SHALL NOT EXCEED 10'

71×11×11×11×11×1

GROUND 1

SURF ACE

SIX (6) GAUGE OR HEAVIER

CHAIN LINK FENCING -

GEDTEXTILE CLASS

A FILTER CLOTH—

EMBED FILTER CLOTH 8"---

MINIMUM INTO GROUND

LAY FILTER CLOTH IN BOTTOM-

fabric and 6 foot length posts.

overlapped by 6" and folded.

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

2. The posts do not need to be set in concrete.

spaced every 24" at the top and mid section.

The chain link fencing shall be six (6) guage or heavier.

OF 24" MIN. WIDE TRENCH

FLOW ----

77K 77K

FLOW

21/2" DIAMETER

GALVANIZED OR

ALUMINUM POSTS

CENTER TO CENTER

CAPITAL PROJECT No. W-8233 CONTRACT No. 44-3851 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND

EDEN BROOK DRIVE WATER EXTENSION

SCALE AS SHOWN

WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE DNE OF THE FOLLOWING SCHEDULES:

1)PREFERRED APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14LBS/1000 SQ FT.) BEFORE SEEDING.

<u>SEEDING</u> FOR THE PERIDDS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SO FT.) OF KENTUCKY 31 TALL FESCUE.

HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

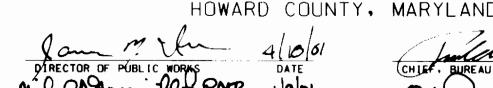
<u>MAINTENANCE</u> - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS TEMPORARY SEEDING NOTES

<u>SOIL AMENDMENTS</u>: · APPLY 60 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT.). SEEDING: - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15. SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

DEPARTMENT OF PUBLIC WORKS





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