New England CP, Inc.

294 EAST STREET, WEST BRIDGEWATER, MASSACHUSETTS 02379
PHONE: (508) 588-6274 FAX: (508) 588-1630

20073008279

7/31/07 12 PM

INSTALLATION INSTRUCTIONS

Proposed Replacement Anode Bed - IACT0043
Newtown Road at Simon Willard Road, Acton
KeySpan Energy Delivery - Leominster Division
June 2007

1. Before installation of this proposed anode bed, verify that there are no other underground structures in the area to be excavated and/or augered.

2. The anode bed is to be installed in the grass area on the southwest side of Newtown Road, northwest of Simon Willard Road.

3. Install the anodes as shown on the attached drawings. Install the anode bed approximately 5 feet off the paved sidewalk for Newtown Road. Install the first anode approximately 30 feet northwest of the paved surface of Simon Willard Road and continue to the northwest.

4. Install each anode vertically in a 25 ft. augered hole (10 holes - 10 anodes total). The top of each anode is to be 15 feet below grade. The augered holes are to be on minimum 10 ft. centers. The depth and number of anodes may be altered at the time of installation with the approval of KeySpan Energy or its representative.

5. Splice the anode lead wires to a looped AWG #8 HMWPE header cable using split-bolt or crimp connectors. Cover each splice with a Plyflex® splice covering kit or approved equal.

6. Install an anode bed test station near the first anode. Use a 9" by 9" cast iron box for the anode bed test station. Route both ends of the looped header cable into the anode bed test station. Cut the existing anode header cable and route the rectifier end of this cable into the anode bed test station.

7. Install all buried cables a minimum of 18 inches below grade.

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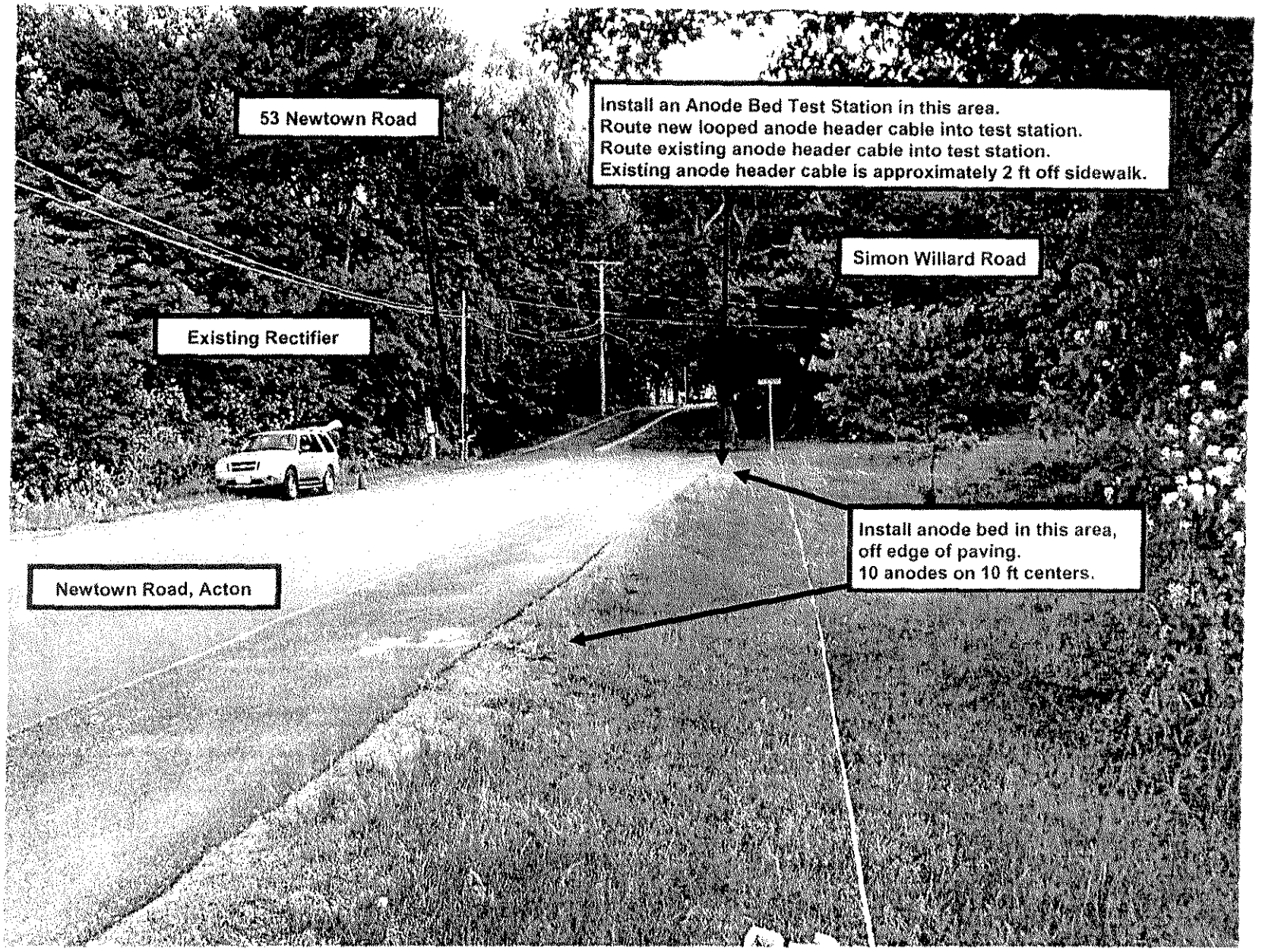
BILL OF MATERIALS

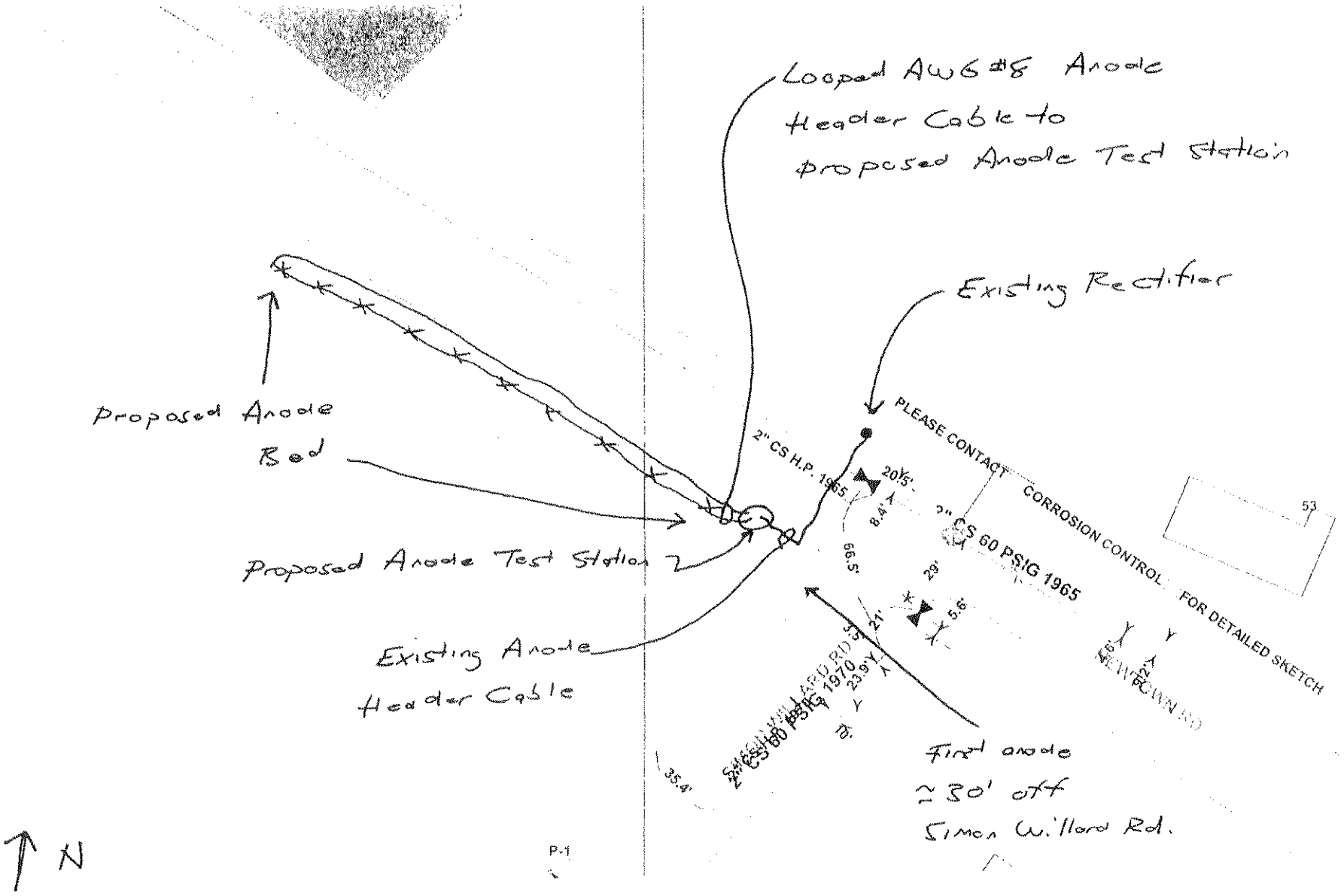
Proposed Replacement Anode Bed - IACT0043
Newtown Road at Simon Willard Road, Acton
KeySpan Energy Delivery - Leominster Division
June 2007

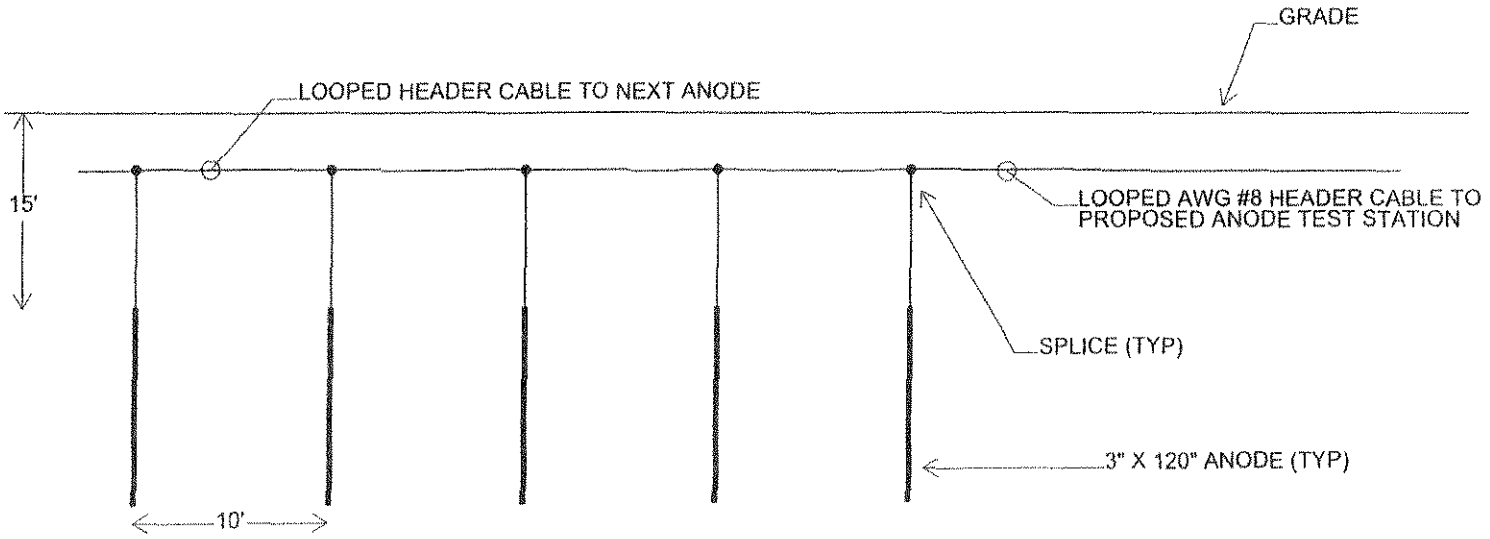
ITEM	QUANTITY	DESCRIPTION
1	10	Anodes: Matcor, Inc. Model MMP31204 - Mixed Metal Oxide Anodes - anode element packaged in 3" x 120" canister, 20 year life at 4 amperes output, with 30 ft. of AWG #8 copper lead wire with HMWPE, Type CP insulation.
2	250 ft.	Cable: AWG #8 copper cable with HMWPE, Type CP insulation.
3	10	Connectors: Burndy KS-15 Copper Split-bolt Connectors.
4	10	Splice Kits: Plyflex® Model 2635 Low Voltage Splice Kits.
5	1	Anode Bed Test Station: Standard KeySpan 9" x 9" Cast Iron Test Box.



Proposed Replacement Anode Bed for IACT0043. Newtown Road at Simon Willard Road, Acton.

Proposed Replacement Anode Bed for IACT0043





ANODE BED LAYOUT - SIDE VIEW

NOTES:

1. TEN (10) ANODES ARE TO BE INSTALLED.
2. INSTALL ANODES VERTICALLY. 15 FT TO TOP OF ANODE.
3. BACKFILL AROUND ANODES WITH NATIVE SOIL. DO NOT USE SAND.

New England CP, Inc.
WEST BRIDGEWATER, MA

PROPOSED REPLACEMENT ANODE BED
NEWTOWN RD, ACTON
IACT0043
KEYSPAN ENERGY DELIVERY

SCALE: NONE	DWG. NO: 0702-002	DATE: 6/12/2007
DRAWN BY: TBW		REV:

New England CP, Inc.

294 EAST STREET, WEST BRIDGEWATER, MASSACHUSETTS 02379
PHONE: (508) 588-6274 FAX: (508) 588-1630

20073008270
7/31/07 12PM

INSTALLATION INSTRUCTIONS

Proposed Replacement Anode Bed - IACT0067
Brook Street behind 250 Great Road, Acton
KeySpan Energy Delivery - Leominster Division
June 2007

1. Before installation of this proposed anode bed, verify that there are no other underground structures in the area to be excavated and/or augered.

2. The anode bed is to be installed in the grass area on the north side of Brook Street, west of the driveway at the rear of 250 Great Road.

3. Install the anodes as shown on the attached drawings. Install the anode bed approximately 2 feet off the paved surface. Install the first anode approximately 5 feet west of the driveway at the rear of 250 Great Road and continue to the west. The location of the anodes can be moved to avoid damaging trees.

4. Install each anode vertically in a 30 ft. augered hole (10 holes - 10 anodes total). The top of each anode is to be 20 feet below grade. The augered holes are to be on minimum 10 ft. centers. The depth and number of anodes may be altered at the time of installation with the approval of KeySpan Energy or its representative.

5. Splice the anode lead wires to a looped AWG #8 HMWPE header cable using split-bolt or crimp connectors. Cover each splice with a Plyflex® splice covering kit or approved equal.

6. Route both ends of the looped header cable into the existing anode bed test station (approximately 125 feet from anode bed to test station). Installation of the anode header cable will require crossing the paved driveway at the rear of 250 Great Road (approximately 40 feet across).

7. Install all buried cables a minimum of 18 inches below grade.

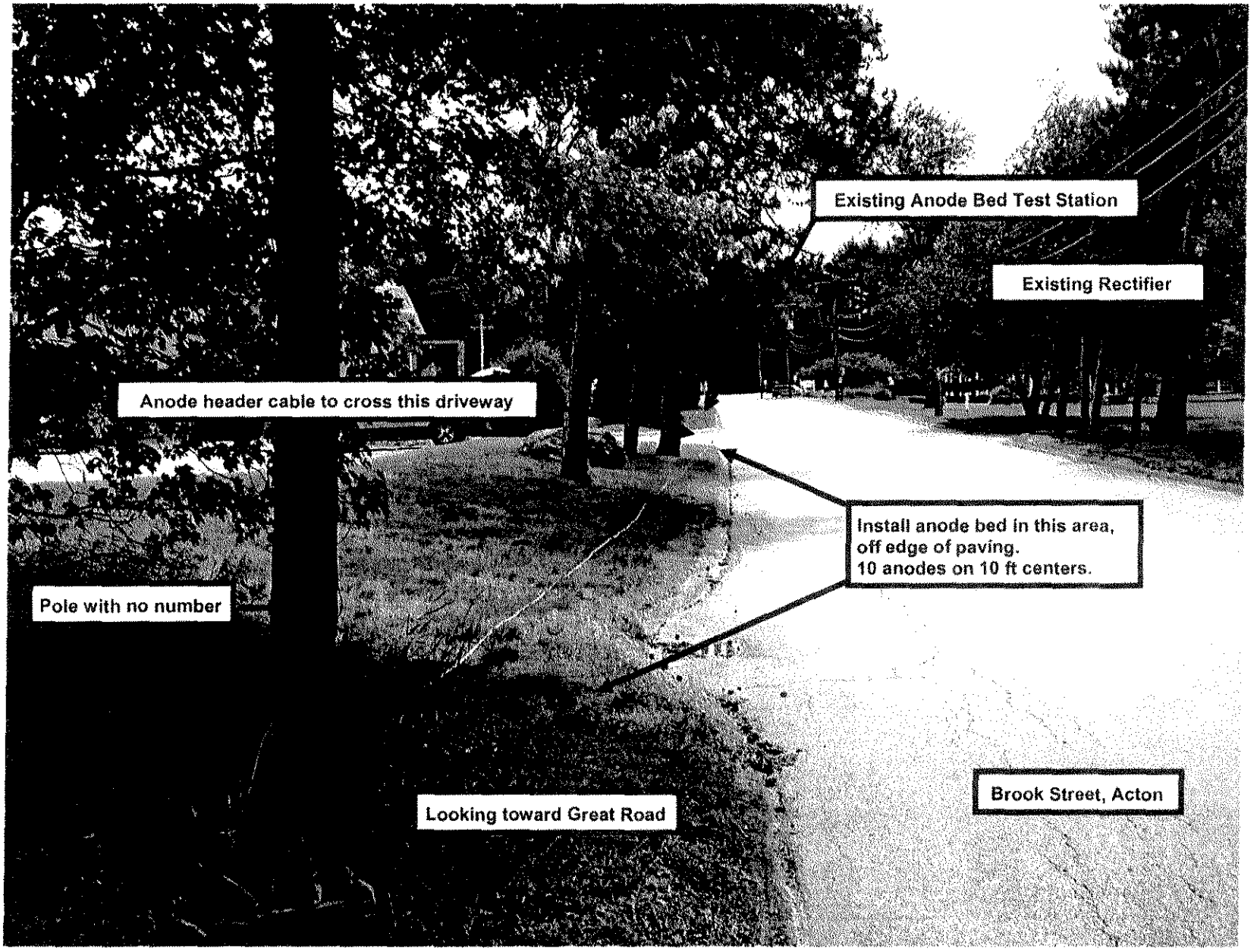
New England CP, Inc.

294 EAST STREET, WEST BRIDGEWATER, MASSACHUSETTS 02379
PHONE: (508) 588-6274 FAX: (508) 588-1630

BILL OF MATERIALS

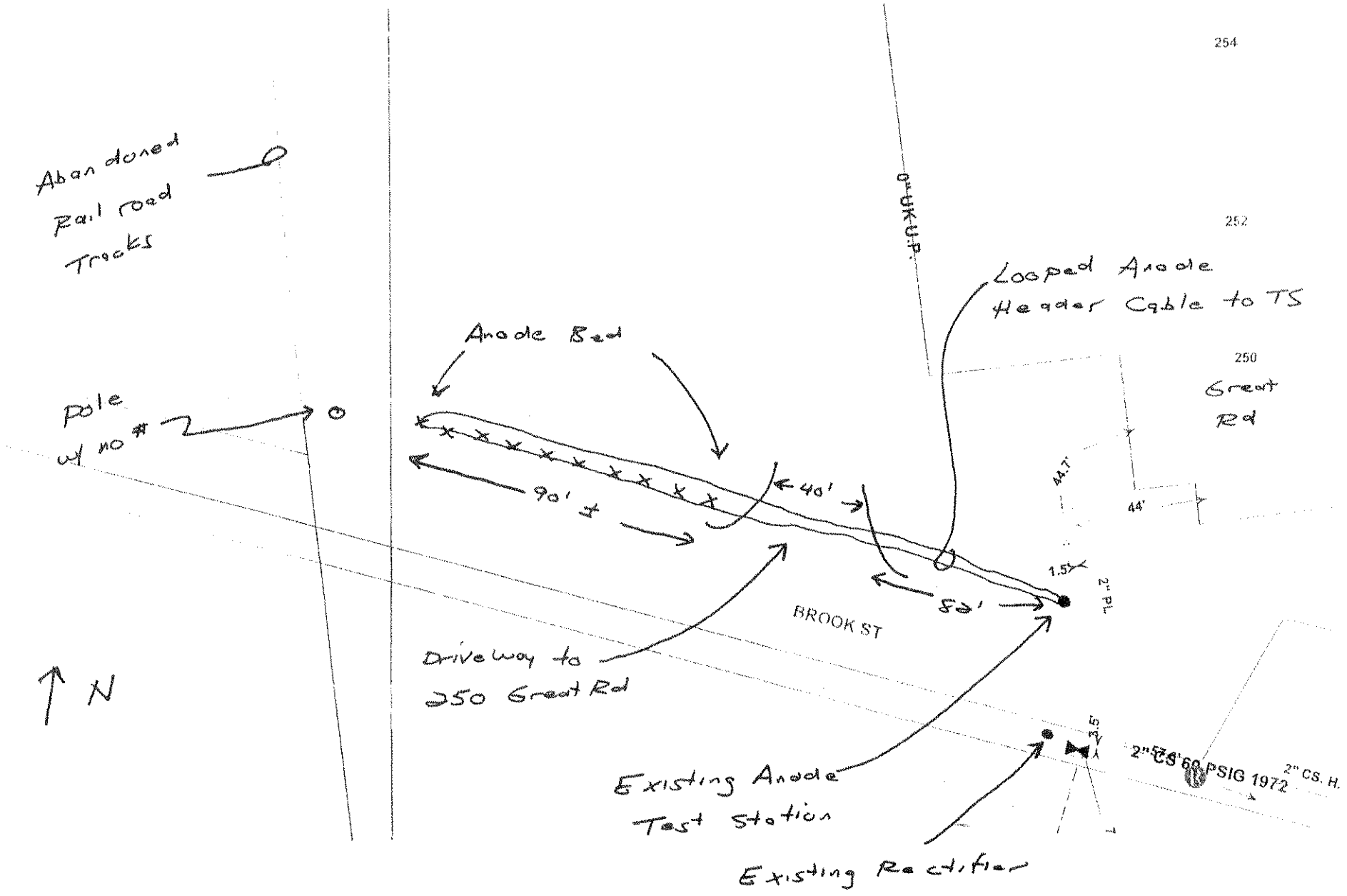
Proposed Replacement Anode Bed - IACT0067
Brook Street behind 250 Great Road, Acton
KeySpan Energy Delivery - Leominster Division
June 2007

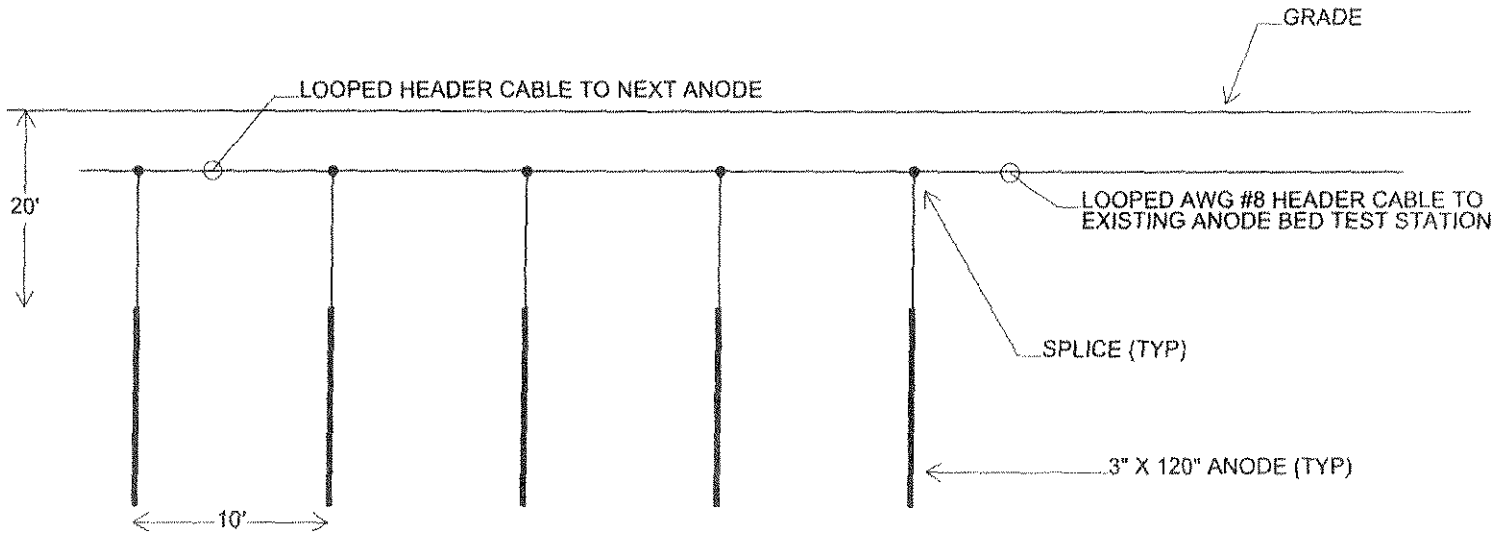
ITEM	QUANTITY	DESCRIPTION
1	10	Anodes: Matcor, Inc. Model MMP31204 - Mixed Metal Oxide Anodes - anode element packaged in 3" x 120" canister, 20 year life at 4 amperes output, with 30 ft. of AWG #8 copper lead wire with HMWPE, Type CP insulation.
2	500 ft.	Cable: AWG #8 copper cable with HMWPE, Type CP insulation.
3	10	Connectors: Burndy KS-15 Copper Split-bolt Connectors.
4	10	Splice Kits: Plyflex® Model 2635 Low Voltage Splice Kits.



Proposed Replacement Anode Bed for IACT0067. Brook Street, Acton behind 250 Great Road.

Proposed Replacement Anode Bed for IACT0067





ANODE BED LAYOUT - SIDE VIEW

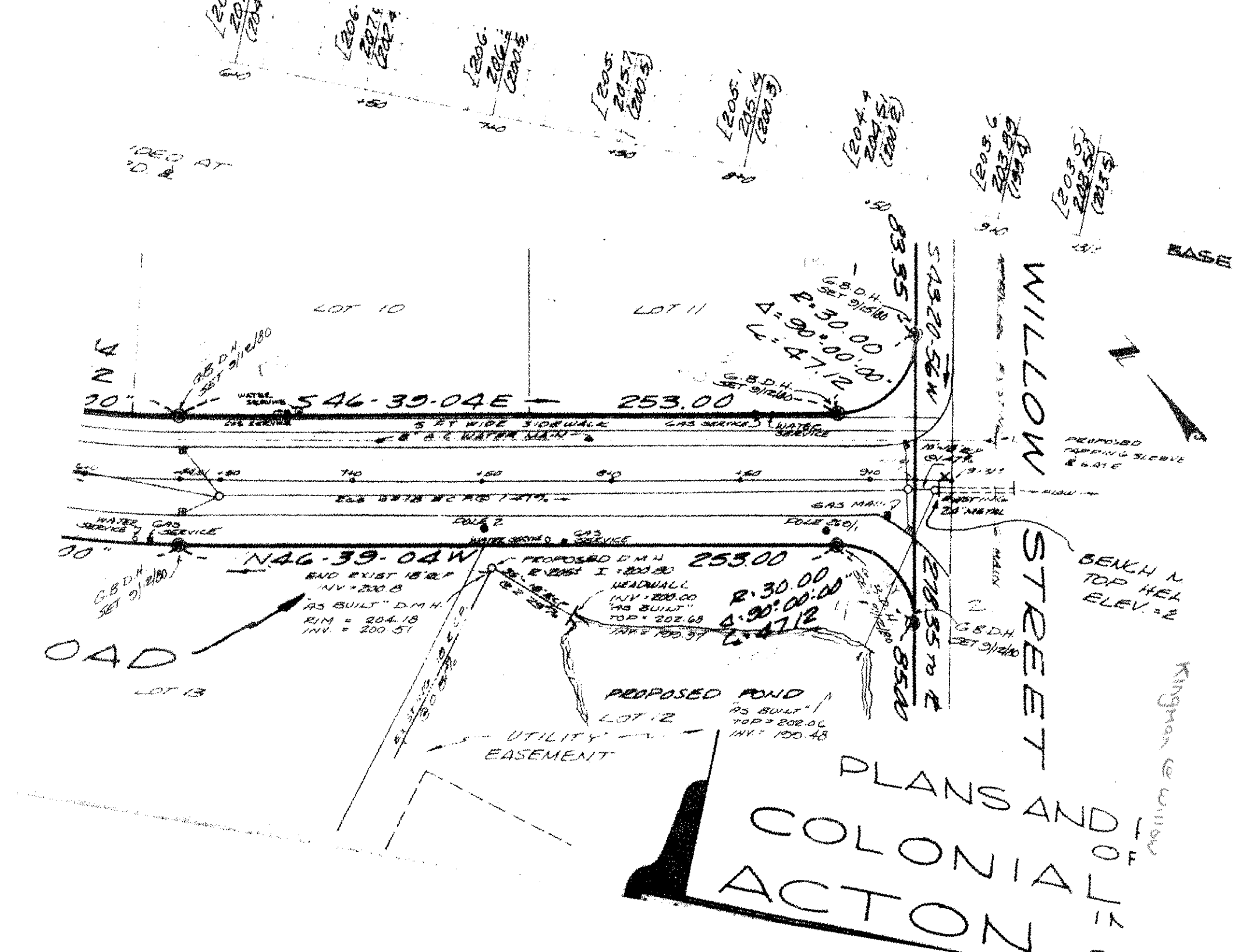
NOTES:

1. TEN (10) ANODES ARE TO BE INSTALLED.
2. INSTALL ANODES VERTICALLY. 20 FT TO TOP OF ANODE.
3. BACKFILL AROUND ANODES WITH NATIVE SOIL. DO NOT USE SAND.

New England CP, Inc.
WEST BRIDGEWATER, MA

PROPOSED REPLACEMENT ANODE BED
BROOK ST, ACTON
IACT0067
KEYSPAN ENERGY DELIVERY

SCALE: NONE	DWG. NO: 0702-001	DATE: 8/12/2007
DRAWN BY: TBW		REV:


PLANS AND
COLONIAL
ACTON
WILLOW STREET
LOT 10
LOT 11
LOT 12
LOT 13
S46-39-04E
253.00
N46-39-04W
253.00
R=30.00
Δ=90°00'00"
L=47.12
S43°20'55"E
N43°20'55"W
PROPOSED POND
UTILITY EASEMENT
5 FT WIDE SIDEWALK
GAS SERVICE
WATER SERVICE
POLE 2
POLE 201
GAS MAIN
BASE

NOTES:

1. THE LOCATION O
ARE APPROXIMATE.
UNDERGROUND PLAN,
72 HOURS PRIOR TO S.
THE GROUND LOCATION O.

2. SILTATION FENCE SHALL SURROU
REMAIN IN PLACE UNTIL VEGETATI

3. GRANITE CURB (SLOPED OR VERTICAL) M.
BITUMINUOUS CONCRETE CAPE COD BERM.

4. BITUMINOUS CONCRETE APRONS WILL BE CONSI
REQUIRING A MINIMUM DEPTH OF 1 1/2" FOR EA

FINNEAULT
BK 24813 PG 583

SAWYER
BK 10372 PG 367

#106-108

#1

PIPER ROAD
(PUBLIC WAY - VARIABLE WIDTH)

EXISTING DRIVEWAYS

S.B.

EXISTING STOP-LINE

PROPOSED STOP SIGN AND STOP LINE

STOP

CROSSWALK

2-18" PINES

PROPOSED SIDEWALK EASEMENT

GRANITE CURB STONES (PARTIALLY BURRIED) (TO BE REMOVED)

G.G.

12" SPRUCE

72" ASH

S.B.

E.O.P.

W.G.

U.P. 49/23

PROPOSED POLE LOCATION

STONE RETAINING WALL

PROPOSED SLOPED GRANITE CURBING

PROPOSED 5' SIDEWALK

PROPOSED POLE LOCATION

U.P. 49/24

15" ELM

PROPOSED POLE LOCATION

CHAIN L

U.P. 49/25

SCHOOL

(PUBLIC WAY

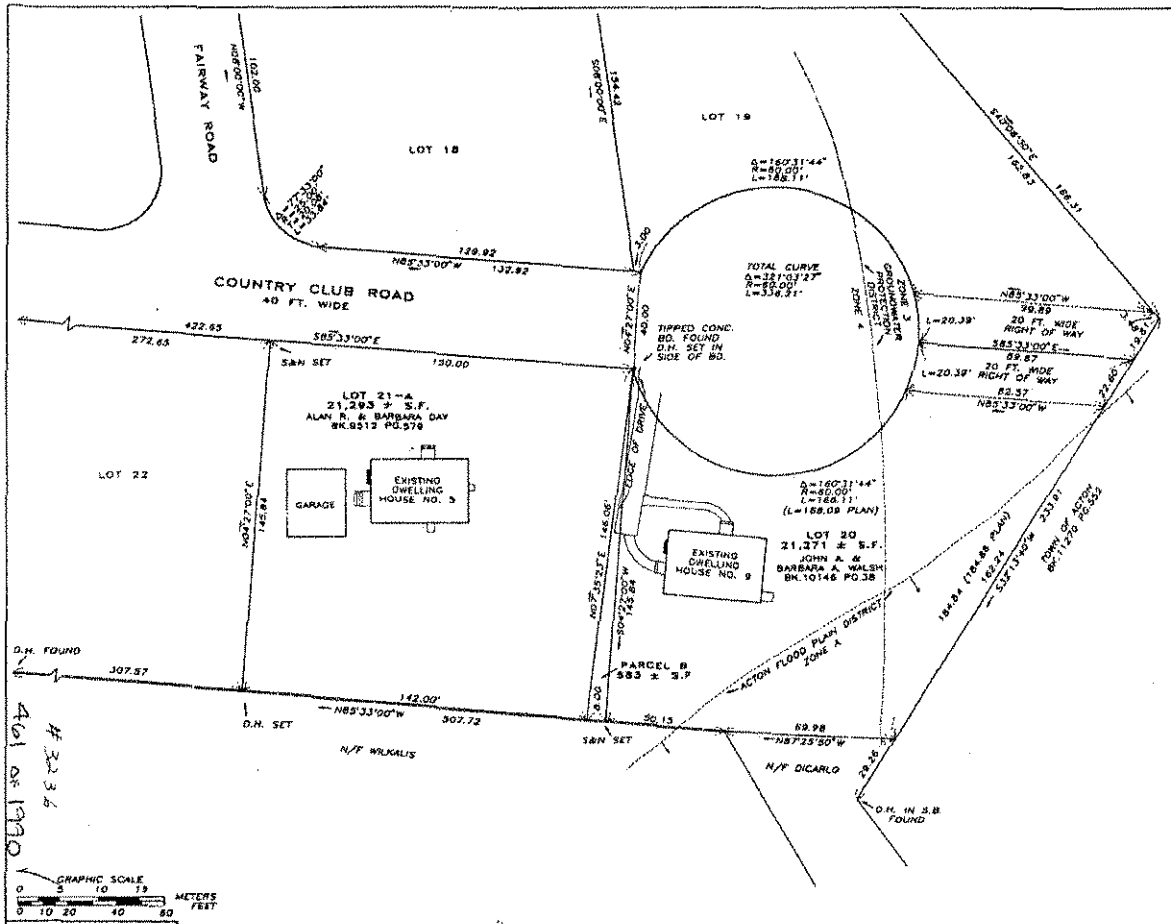
DRIVE

W.G.

SED SLOPED
ITE CURBING

9/22

Country Club Rd



PLAN AND DEED REFERENCES:
SEE THE FOLLOWING PLANS AND DEEDS RECORDED AT MIDDLESEX SOUTH DISTRICT REGISTRY OF DEEDS.
BK.8731 PG.337–PLAN BY SCHOFIELD BROTHERS,R.C.E., DATED MAY 4, 1956.
BK.9154 PG.1–PLAN BY DIVA E. HINTSA ASSOC.,CON. ENG., DATED DEC. 1957.
BK.8512 PG.579–DEED TO ALAN R. & BARBARA DAY.
BK.10146 PG.38–DEED TO JOHN A. & BARBARA A. WALSH.

NOTE: PARCEL B OF ITSELF IS NOT A BUILDING LOT AND IS TO BE CONVEYED TO THE OWNER OF LOT 20.

NOTES RELATIVE TO PROPERTY LINE DISTANCES OF LOT 20:
REAR PROPERTY LINE DISTANCE OF 69.98 IS CORRECT DISTANCE FROM PL IN BOOK 8731 PAGE 337; FRONTAGE AND EASTERLY PROPERTY LINE DISTA ARE COMPUTED DISTANCES.

ASSESSORS ATLAS: PLATE I-3, PARCEL 54 AND PLATE I-3, PARCEL 147
ZONING: RESIDENCE 2 WITH FLOOD PLAIN OVERLAY AND GROUNDWATER PROTECTION OVERLAY

NOTE RELATIVE TO ZONING OVERLAY DISTRICTS:
THE ZONING OVERLAY DISTRICTS AS SHOWN ON THIS PLAN ARE APPROXIMATIONS ONLY AS THEY HAVE BEEN SCALED FROM THE F.E.M.A. MAP – COMMUNITY 250178 PANEL NUMBER 0003C – EFFECTIVE DATE JAN. 6, 1988 WHICH IS AT A SCALE OF 1 INCH = 400 FEET AND THE GROUNDWATER PROTECTION DISTRICT MAP NO. 3A AT A SCALE OF 1 INCH = 1200 FEET.

Middlesex Registry of Deeds,
Southern District
Cambridge, Massachusetts
Plan No. 461 of 19 90
Rec'd 461 19 90
at 3 h 39 m Pm Doc No. 433
Rec'd, Bk. 20576 Page 389
Attest:
Register

"I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS."
JOHN E. DUNPHY, JR.,R.P.L.S.22158
DATE: JAN. 16, 1990

ACTON PLANNING BOARD
"APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED."
DATE: January 16th, 1990

PLAN OF LAND
IN
ACTON - MASS.
PREPARED FOR: JOHN A. & BARBARA A. WALSH
SCALE: 1 INCH = 20 FEET JANUARY 3, 1990
ACTON SURVEY & ENGINEERING, INC
277 CENTRAL ST. - ACTON - MASS.

FILE NO. 2455

461 of 1990
#3236

Land in Acton

owned by

Harlan E. Tuttle and Gertrude P. Tuttle

by

Harlan E. Tuttle, Surveyor

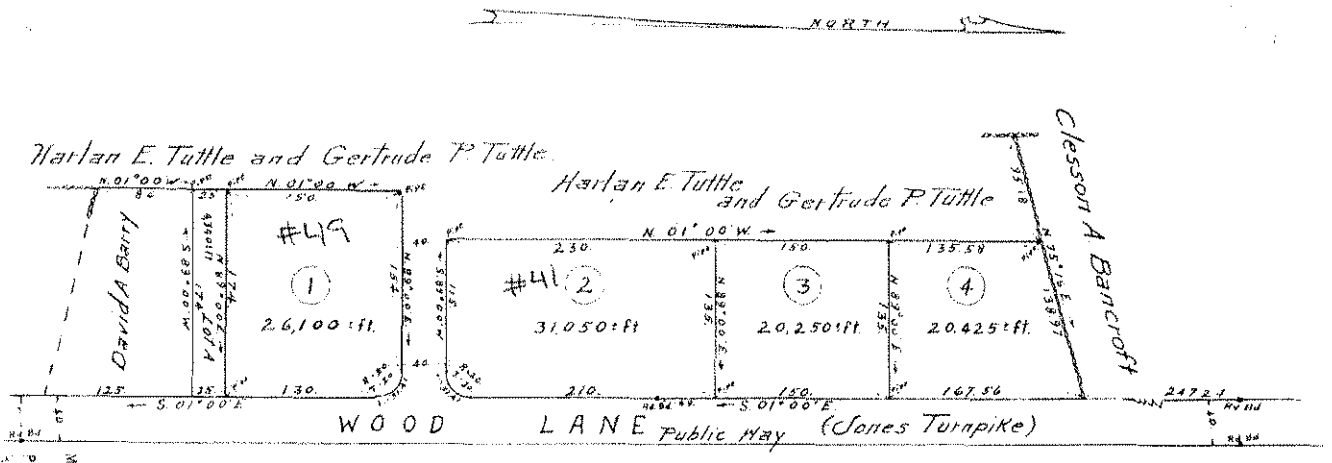
February 13, 1957

Scale 100 feet = 1 inch

Acton Planning Board

Approval under the Subdivision Control Law

Not Required Chap. 41. Sect 81 P.

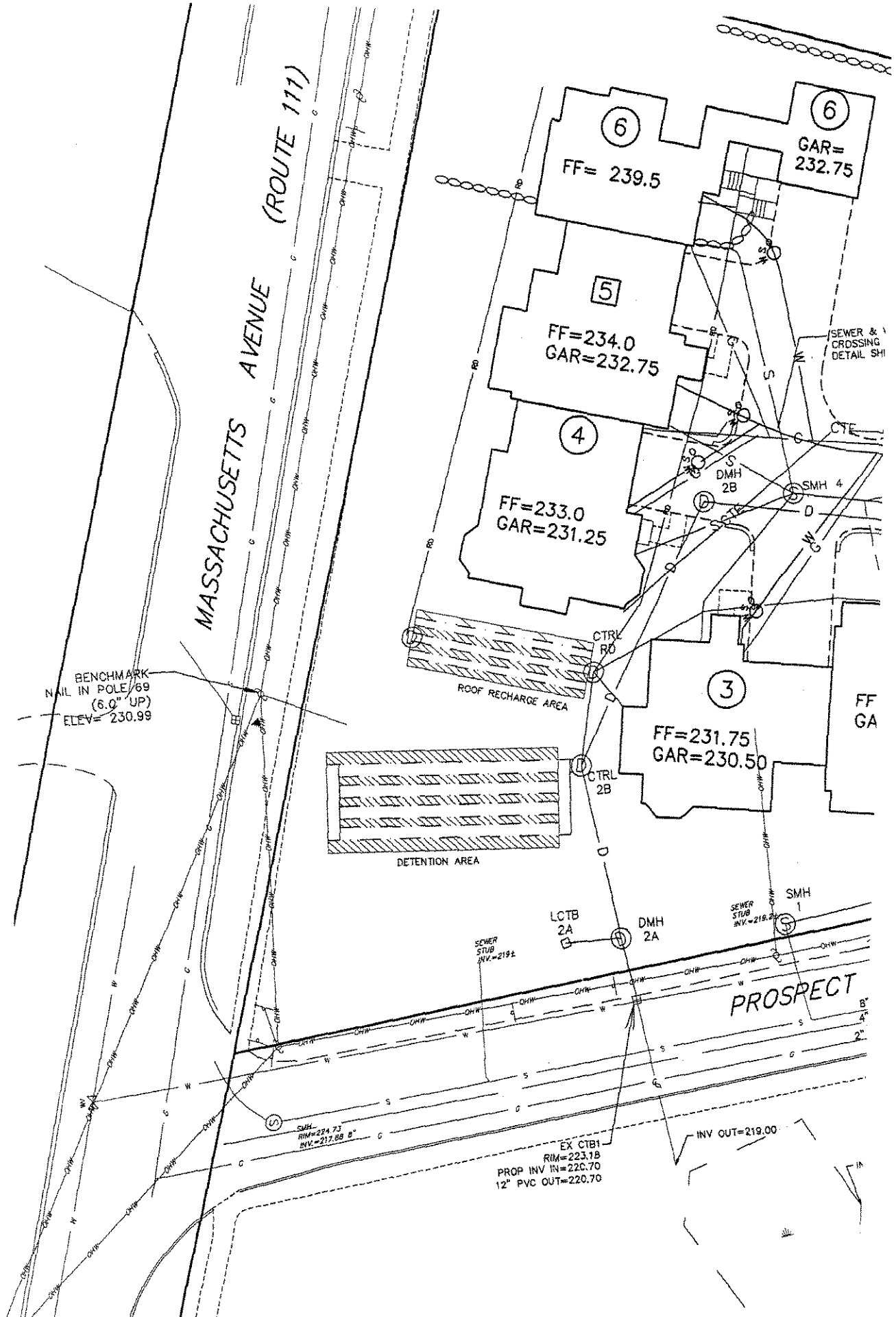


Middlesex Registry of Deeds, So. Dist.
CAMBRIDGE, MASS.
Plan number 627 of 1957
recd May 8, 1957 at 3 h 23 m P.M.
With Deed of No. 261
Harlan E. Tuttle, etux
John Pederson, et ux
Recorded, Book 8945 Page 221
Attest: [illegible]
REGISTER

V

22 1957

Wood Lane



SCHEDULE OF SEWER