NOTE: ELEVATIONS ARE BASED ON NGVD 1929 DATUM IN ACCORDANCE WITH NOTE 8 ON THE ALTA/ACSM SURVEY PREPARED BY CONTROL POINT ASSOCIATES.

ALL MATERIALS TO CONFORM TO TOWN OF ACTON STANDARDS

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES

SEE GRADING & DRAINAGE PLAN A

SEE GRADING & DRAINAGE PLAN B

SEE GRADING & DRAINAGE PLAN C

EASEMENT "A"

EASEMENT "D"

EXISTING FF 189.86'

EXISTING FF 186.85'

FF 189.86'

FF 186.85'

GC TO REMOVE PAVEMENT NECESSARY FOR TRENCHING OF DRAINAGE LINE AND BACKFILL, COMPACT AND REPAVE PER THE HEAVY DUTY PAVEMENT SECTION ON THE DETAIL SHEETS

GC TO REMOVE PAVEMENT AND GRADE AS SHOWN, GC TO REPAVE PER THE HEAVY DUTY PAVEMENT SECTION ON THE DETAIL SHEETS

GC TO VERIFYGRADES WITHIN HANDICAP PARKING AREAS AND ACCESSIBLE ROUTES DO NOT EXCEED 2% IN ANY DIRECTION

GC TO ADJUST STAIRS AS NEEDED TO ACHIEVE GRADES AND RESTORE TO ORIGINAL CONDITION

REFER TO PLANS BY MDM TRANSPORTATION CONSULTANTS, INC. FOR FINAL DESIGN AND DETAILS ASSOCIATED WITH THIS AREA

20' WIDE DRAIN EASEMENT

BENCHMARK 2
MAG NAIL SET IN PAVEMENT
ELEVATION=181.88'

DMH A
R=186.15
INV. (IN)=183.00
INV. (OUT)=182.70

EX. DMH 9
R=183.36
INV. (IN(-A)=180.00
INV. (OUT(-B)=179.80
PROP INV (IN)=180.00

EX. MH 32
R=186.83
(RAISE RIM TO 187.20)
INV. (IN)=185.23±
BOT. OF STRUCTURE=182.40
PROP. INV. (OUT)=185.00

DMH 13
R=183.36
INV. (IN)=180.00
INV. (OUT)=179.80

CB D
R=183.56
INV. (IN-CB D)=179.00
INV. (IN-CB E)=179.00
INV. (OUT-EX.)=176.2±
(GC TO VERIFY EX. INVERT)

EX. DMH 7
QRT=185.23
INV. (IN-A)=182.60±
INV. (IN-B)=176.50
INV. (OUT-C)=176.40
PROP INV (IN)=181.10
GC TO VERIFY STRUCTURE CAN ACCOMMODATE NEW CONNECTION AND, REPLACE STRUCTURE IF NEEDED

WYE INV.=200.00

CROSSING
TOP OF SEWER=200.1±
INV. OF STORM=200.8±
(ENCASE IN CONCRETE)

AREA TO BE RETURNED TO EXISTING GRADE AND STABILIZED WITH JUTE NETTING OR APPROVED EQUAL IF SLOPES EXCEED 3:1 (GC TO PROTECT LARGE TREES WHERE POSSIBLE BY USED OF TREE PROTECTION FENCING)

90'-12" HDPE, S=0.025

CB I
GRT=189.50
INV. (IN)=186.45
INV. (OUT)=186.45

94'-15" HDPE, S=0.005

PROP INV.=185.98
(GC TO PERFORM A TEST/PIT PRIOR TO STORM PIPE INSTALLATION TO VERIFY THAT INVERTS WORK AND NOTIFY ENGINEER IF ANY CONFLICTS ARISE BEFORE CONSTRUCTION

135'-6" HDPE, S=0.02

100'-6" HDPE, S=0.2

RIP-RAP CURB-CUT

TC=207.71
MEBC=206.71

TC=206.75
LHBC=206.25

TC=206.75
RC=206.25

TC=207.10
BC=206.60

TC=207.60
BC=207.10

TC=207.30
BC=206.80

TC=182.50
BC=182.22ME
4" ASPH. CURB

TC=182.58
BC=182.28
4" ASPH. CURB

TC=182.71
BC=182.38
4" ASPH. CURB

TC=182.49
BC=182.19
4" ASPH. CURB

TC=183.29
BC=182.99
4" ASPH. CURB

TC=183.39
BC=182.99ME
4" ASPH. CURB

TC=184.29
MEBC=183.79

TC=184.09
BC=183.59

TC=183.79
ME=182.99

TC=183.43
BC=184.68

TC=183.54
MEBC=184.04

TC=183.03
BC=184.68

TC=183.78
MEBC=183.68

TC=184.00
BC=183.50

TC=184.18
BC=183.68

TC=184.28
BC=183.78

TC=184.50
BC=184.00

TC=183.93
BC=183.64

STRUCTURE SCHEDULE

ITEMS	RIM/GRT	INVERT
SMH1	177.26	171.1
SMH2	178.77	SEALED
SMH3	184.09	175.7
SMH4	189.67	180.6
SMH5	191.35	183.5
SMH6	206.81	200.1
SMH7	211.37	201.3
SMH8	188.24	184.1
SMH9	214.17	204.5
SMH10	203.31	197.8 (N.P.I.)
SMH11	206.98	200.6(A) 200.6(B) 200.5(C)
SMH12	207.02	203.1
MH1	174.86	F.O.W.
MH2	194.60	190.4
MH3	194.20	SEALED
MH4	193.40	190.6
MH5	183.41	4" ENCLOSED PIPE T.O.P.=181.4±
MH6	182.97	179.8(A) 179.9(B)
MH7	183.37	U.T.O. (BROKEN COVER)
MH8	183.89	4" ENCLOSED PIPE T.O.P.=181.2± T.O.C.=180.5±
MH9	184.68	180.1
MH10	185.03	BOT=178.0± (F.O.W.)
MH11	185.17	OBSTRUCTED BY PARKED VEHICLE
MH12	185.41	183.6± F.O.S.
MH13	185.51	BOT=172.9± F.O.W.
MH14	185.61	SEALED
MH15	185.79	BOT=178.2± F.O.S.
MH16	185.87	BOT=177.8± F.O.S.
MH17	185.99	184.3
MH18	186.00	178.5±
MH19	186.80	179.7(A) 179.5(B) 179.3(C) 179.1(D)
MH20	186.21	179.7(A) 179.5(B)
MH21	185.81	BOT=180.1±
MH22	185.78	BOT=176.7± N.V.P.
MH23	186.02	182.1± BOT=176.8±
MH24	186.73	180.6
MH25	187.27	183.4 BOT=183.3±
MH26	187.94	183.8(A) 186.4(B)
MH27	188.54	187.1 BOT=183.1±
MH28	188.96	OBSTRUCTED BY PARKED VEHICLE
MH29	204.85	WL=199.8± F.O.W.
MH30	207.03	SEALED
MH31	207.06	F.O.D./N.V.P.
MH32	186.83	INV.=185.23± BOT=182.4± F.O.W.
MH33	212.50	UNABLE TO OPEN
DMH1	174.88	169.6(A) 168.6(B) 168.3(C)
DMH2	185.13	180.5(A) 178.5(B)
DMH3	192.50	186.6
DMH4	189.52	OBSTRUCTED BY PARKED VEHICLE
DMH5	189.67	
DMH6	188.48	185.1(A) 181.6(B) 181.4(C)
DMH7	185.23	182.6(A) 176.5(B) 176.4(C)
DMH8	181.91	179.5(A) 175.8(B) BOT=167.4±
DMH9	183.36	180.0(A) 179.8(B)
DMH10	211.28	209.8(A) 208.9(B)
DMH11	209.4	209.4(A) 205.4(B)
DMH12	211.57	206.4
DMH13	181.5	174.4±
CB1	174.78	171.1±
CB2	174.63	169.7±
CB3	184.91	181.4±
CB4	185.11	180.8±
CB5	188.71	F.O.D.
CB6	189.59	186.8±
CB7	188.26	186.1±
CB8	184.74	182.8
CB9	181.62	178.6
CB10	181.54	176.8(A) BOT=175.3±
CB11	177.26	BOT=170.6± (N.V.P.)
CB12	181.24	
CB13	182.81	BOT=177.3±
CB14	181.37	178.0 BOT=171.0±
CB15	206.27	202.5(A) 202.4(B)
CB16	209.47	205.9(A) 206.2(B)
CB17	210.32	205.8
CB18	210.27	208.2± (PIPE CLOSED)
CB19	182.25	
CB20	182.86	
CB21	181.3	179.1

811 Know what's below. Call before you dig.

20 10 5 0 20
1"= 20'

P:\11WW\11028\DWG\WW11028SS5.dwg, 8566, 4/23/2013, 10:17:14 AM, tuesbery, Xerox 6015 (Ltr),1,User34, 1:1

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REVISIONS

REV	DATE	COMMENT	BY
1	1/16/13	REVISED PARKING LAYOUT PER CLIENT	KBS
2	2/25/13	REVISED PER CLIENT MEETING	KBS
3	3/20/13	REVISED PER CLIENT COMMENTS AND ARCH.	KBS
4	4/30/13	REVISED PER CLIENT COMMENTS	KBS
5	5/20/13	REVISED PER TOWN / CLIENT COMMENTS	KBS

PRELIMINARY

PROJECT No.:	W111028
DRAWN BY:	KBS
CHECKED BY:	JGS
DATE:	10/22/2012
SCALE:	AS NOTED
CAD I.D.:	W111028SS5

PROJECT:
SITE DEVELOPMENT PLANS
FOR
EDENS.

LOCATION OF SITE
LOTS 81, 89, 89-1, 97, 97-1, 98 & 115, MAP F3
MASSACHUSETTS AVENUE & MAIN STREET
TOWN OF ACTON
MIDDLESEX COUNTY, MA

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SHEET TITLE:
GRADING & DRAINAGE PLAN C

SHEET NUMBER:
8
OF 11

REV 5 - 05/20/2013