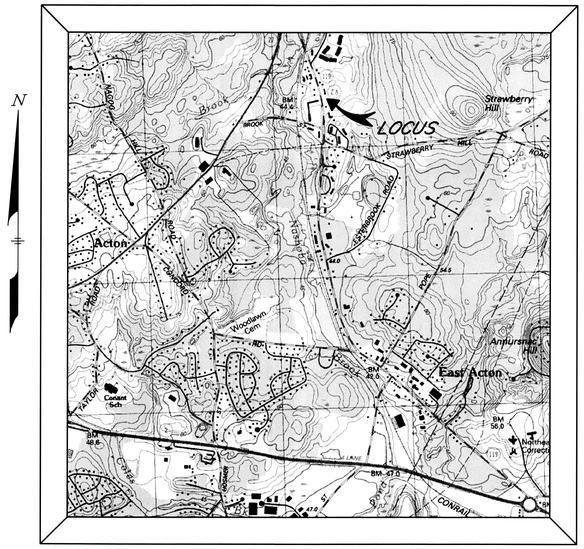
SITE PLAN
FOR
ACTON MANAGEMENT, INC.
267 GREAT ROAD
ACTON, MASSACHUSETTS

DATE: JUNE 27, 2014

INDEX

SHEET 1	TITLE SHEET
SHEET 2	EXISTING CONDITIONS PLAN
SHEET 3	GRADING & DRAINAGE PLAN
SHEET 4	LAYOUT PLAN
SHEET 5-6	CONSTRUCTION DETAILS



LOCUS PLAN

RECORD OWNER:
SPS-ACTON, LLC

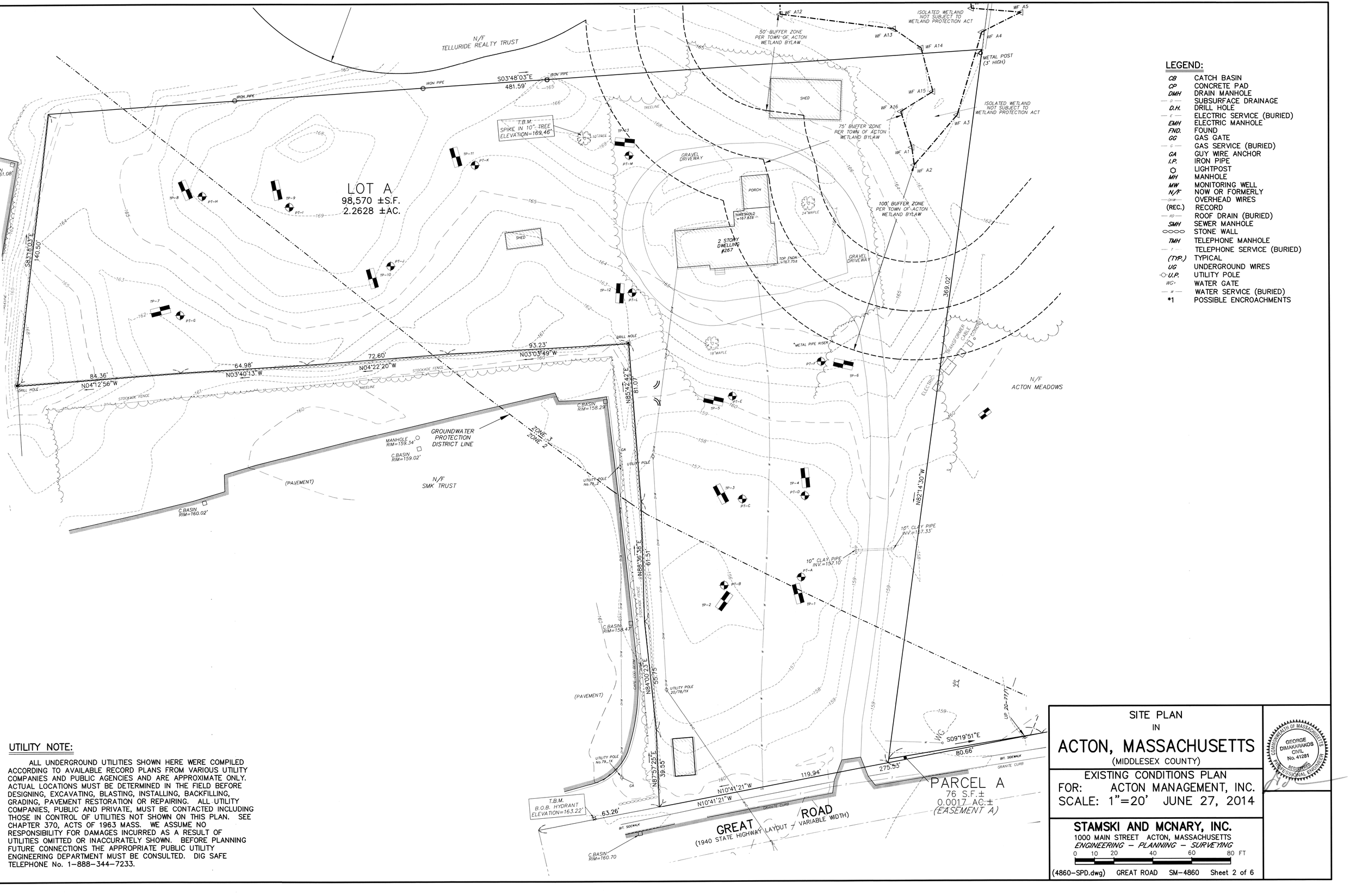
APPLICANT:
ACTON MANAGEMENT, INC.
P.O. BOX 2350, 69 GREAT ROAD
ACTON, MA

ZONING DISTRICT:
LIMITED BUSINESS
GROUNDWATER PROTECTION DISTRICTS
ZONES 2 AND 3

REFERENCES:
MIDDLESEX REGISTRY OF DEEDS
SOUTH DISTRICT
TOWN MAP E5 PARCEL 13
DEED BOOK 59933 PAGE 547
DEED BOOK 60658 PAGE 414
PLAN No. 269 OF 1933
PLAN No. 878 OF 2012

COMMONWEALTH OF MASSACHUSETTS
GEORGE DIMAKARAKOS
CIVIL
No. 41281
REGISTERED PROFESSIONAL ENGINEER

ENGINEER/SURVEYOR
STAMSKI AND MCNARY, INC
1000 MAIN STREET
ACTON, MASSACHUSETTS 01720
(978) 263-8585



LEGEND:

CB	CATCH BASIN
CP	CONCRETE PAD
DMH	DRAIN MANHOLE
— D —	SUBSURFACE DRAINAGE
D.H.	DRILL HOLE
— E —	ELECTRIC SERVICE (BURIED)
EMH	ELECTRIC MANHOLE
FND.	FOUND
GG	GAS GATE
— G —	GAS SERVICE (BURIED)
GA	GUY WIRE ANCHOR
I.P.	IRON PIPE
○	LIGHTPOST
MH	MANHOLE
MW	MONITORING WELL
N/F	NOW OR FORMERLY
—OHE—	OVERHEAD WIRES
(REC.)	RECORD
— RD —	ROOF DRAIN (BURIED)
SMH	SEWER MANHOLE
○○○○	STONE WALL
TMH	TELEPHONE MANHOLE
— T —	TELEPHONE SERVICE (BURIED)
(TYP.)	TYPICAL
UG	UNDERGROUND WIRES
U.P.	UTILITY POLE
WG	WATER GATE
— W —	WATER SERVICE (BURIED)
*1	POSSIBLE ENCROACHMENTS

UTILITY NOTE:

ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG SAFE TELEPHONE No. 1-888-344-7233.

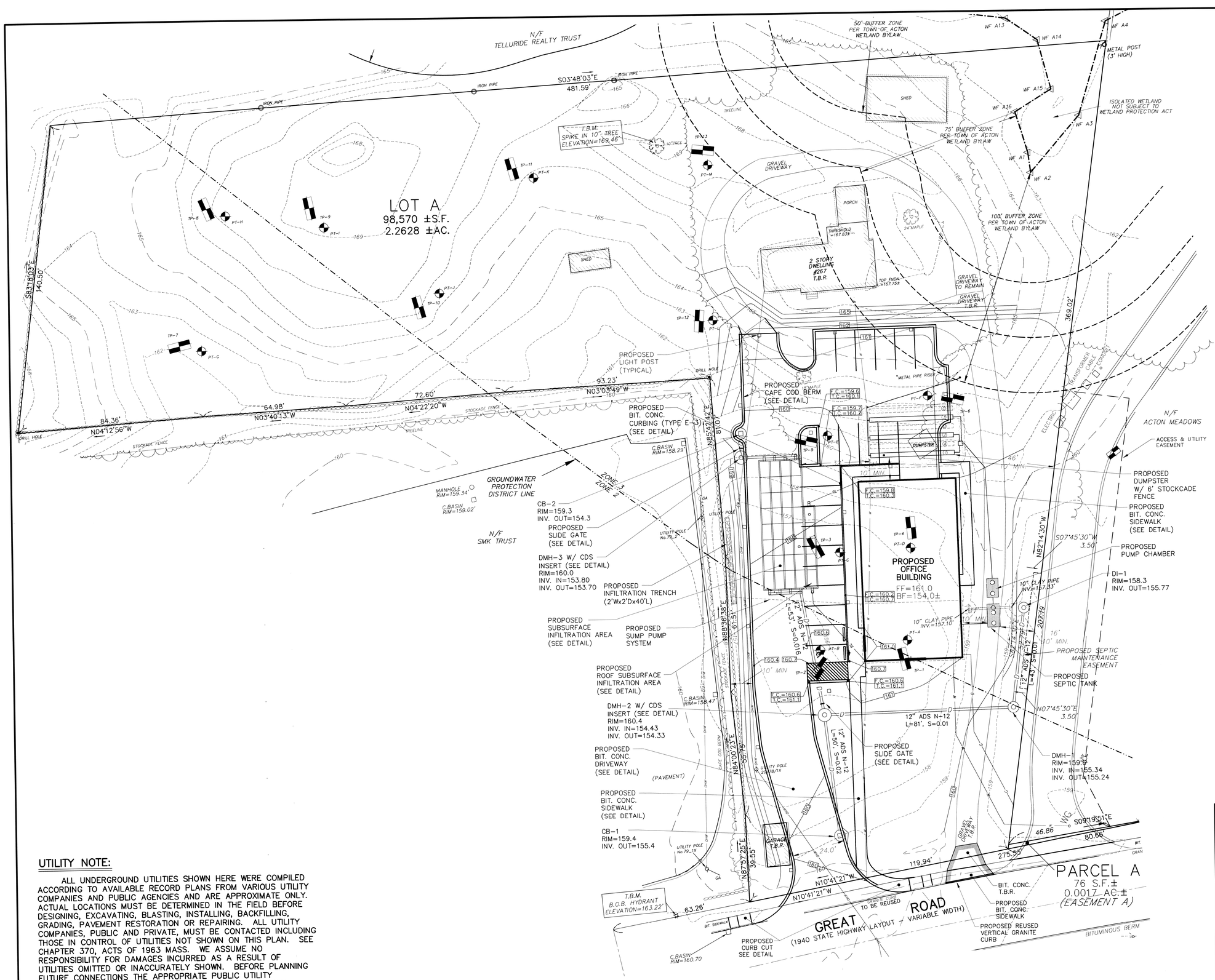
SITE PLAN
IN
ACTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

EXISTING CONDITIONS PLAN
FOR: ACTON MANAGEMENT, INC.
SCALE: 1"=20' JUNE 27, 2014

STAMSKI AND MCNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING - PLANNING - SURVEYING
0 10 20 40 60 80 FT

COMMONWEALTH OF MASSACHUSETTS
GEORGE DIMAKARAKOS
CIVIL
No. 41281
REGISTERED PROFESSIONAL ENGINEER

(4860-SPD.dwg) GREAT ROAD SM-4860 Sheet 2 of 6



LEGEND:

CB	CATCH BASIN
CP	CONCRETE PAD
DMH	DRAIN MANHOLE
— D —	SUBSURFACE DRAINAGE
D.H.	DRILL HOLE
— E —	ELECTRIC SERVICE (BURIED)
EMH	ELECTRIC MANHOLE
FND.	FOUND
GG	GAS GATE
— G —	GAS SERVICE (BURIED)
GA	GUY WIRE ANCHOR
I.P.	IRON PIPE
○	LIGHTPOST
MH	MANHOLE
MW	MONITORING WELL
N/F	NOW OR FORMERLY
— OHW —	OVERHEAD WIRES
(REC.)	RECORD
— RD —	ROOF DRAIN (BURIED)
SMH	SEWER MANHOLE
○○○○	STONE WALL
TMH	TELEPHONE MANHOLE
— T —	TELEPHONE SERVICE (BURIED)
(TYP.)	TYPICAL
UG	UNDERGROUND WIRES
-○- U.P.	UTILITY POLE
WG	WATER GATE
— W —	WATER SERVICE (BURIED)
*1	POSSIBLE ENCROACHMENTS

UTILITY NOTE:

ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG SAFE TELEPHONE No. 1-888-344-7233.

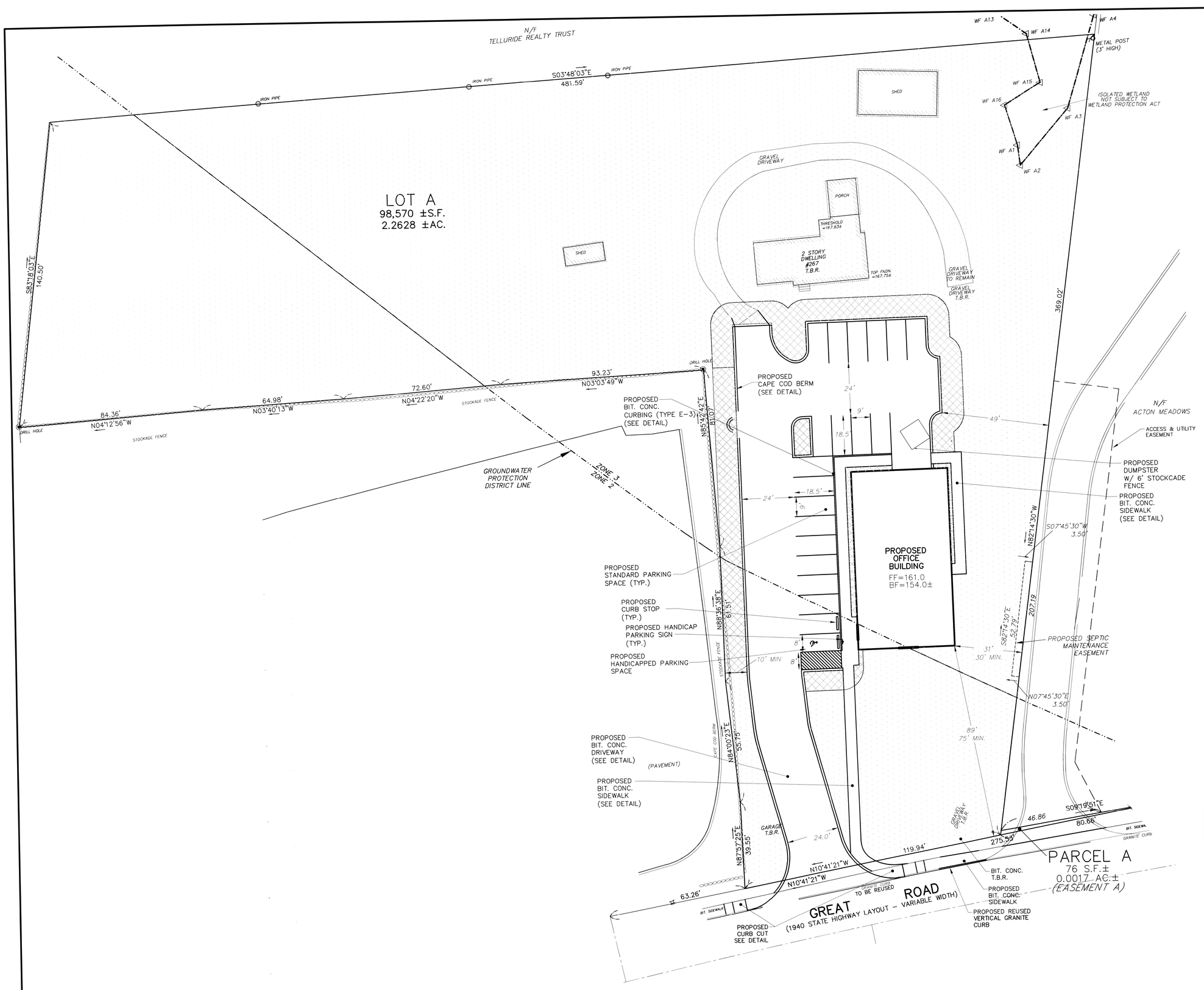
SITE PLAN
IN
ACTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

GRADING AND DRAINAGE PLAN
FOR: ACTON MANAGEMENT, INC.
SCALE: 1"=20' JUNE 27, 2014

STAMSKI AND MCNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING - PLANNING - SURVEYING
0 10 20 40 60 80 FT

(4860-SPD.dwg) GREAT ROAD SM-4860 Sheet 3 of 6

COMMONWEALTH OF MASSACHUSETTS
GEORGE DIMAKARAKOS
CIVIL
No. 41281
REGISTERED PROFESSIONAL ENGINEER



LEGEND:

CB	CATCH BASIN
CP	CONCRETE PAD
DMH	DRAIN MANHOLE
— D —	SUBSURFACE DRAINAGE
D.H.	DRILL HOLE
— E —	ELECTRIC SERVICE (BURIED)
EMH	ELECTRIC MANHOLE
FND.	FOUND
GG	GAS GATE
— G —	GAS SERVICE (BURIED)
GA	GUY WIRE ANCHOR
I.P.	IRON PIPE
	LIGHTPOST
MH	MANHOLE
MW	MONITORING WELL
N/F	NOW OR FORMERLY
— OHW —	OVERHEAD WIRES
(REC.)	RECORD
— RD —	ROOF DRAIN (BURIED)
SMH	SEWER MANHOLE
	STONE WALL
TMH	TELEPHONE MANHOLE
— T —	TELEPHONE SERVICE (BURIED)
(TYP.)	TYPICAL
UG	UNDERGROUND WIRES
U.P.	UTILITY POLE
WG	WATER GATE
— W —	WATER SERVICE (BURIED)
	PERIMETER LANDSCAPING
	OPEN SPACE

LAND USE DATA

ZONING REQUIREMENTS

ZONING DISTRICT: LIMITED BUSINESS (LB)

	REQUIRED:	PROVIDED:
MIN LOT AREA:	20,000 SF	98,646 SF
MIN LOT FRONTAGE:	200 FT	200.6 FT
MIN LOT WIDTH:	50 FT	> 50 FT
MIN FRONT YARD:	75 FT	> 75 FT
MIN SIDE & REAR YARD:	30 FT	31 FT
MIN OPEN SPACE: LOT AREA IN ZONE 2: 31,067 SF LOT AREA IN ZONE 3: 67,579 SF		
GWPD ZONE 2:	70% (21,747 SF)	82% (25,426)
GWPD ZONE 3:	50% (33,790 SF)	75% (50,561)
MIN UNDISTURBED OPEN SPACE:		
GWPD ZONE 2:	40% (12,427 SF)	56% (17,453)
MAX. IMPERVIOUS COVERAGE:		
GWPD ZONE 2:	30% (9,320 SF)	19% (5,791)

FLOOR AREA REQUIREMENTS

LOT AREA = (ROW) (WET)	98,646 SF
DEVELOPABLE SITE AREA (DSA) = 98,646-76-1,086=	97,484 SF
MAX NET FLOOR AREA ALLOWED : 0.2 x 97,484 =	19,496 SF
PROPOSED NET FLOOR AREA =	3,605 SF
PROPOSED OFFICE NET FLOOR AREA =	3,605 SF
PROPOSED NET FLOOR AREA RATIO =	0.04

PARKING REQUIREMENTS:
(FROM SECTION 5.4.6.2)

MAXIMUM # PARKING SPACES: 1 SPACE / 3,000 SF OF DSA X 97,484 SF =	32 SPACES
(FROM SECTION 6.3.1)	
OFFICE USE : 1 SPACE / 250 SF OF NFA x 3,600 SF =	14 SPACES
NUMBER OF SPACES REQ'D =	14 SPACES
NUMBER OF SPACES PROVIDED =	20 SPACES*

*STANDARD SIZE = 19 AND HANDICAPPED SPACE(S) = 1

SEWAGE FLOW:
3,600 SF OFFICE X 75 GPD/1000 SF = 270 GPD

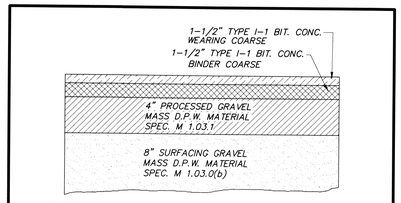
SITE PLAN
IN
ACTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

LAYOUT PLAN
FOR: ACTON MANAGEMENT, INC.
SCALE: 1"=20' JUNE 27, 2014

COMMONWEALTH OF MASSACHUSETTS
GEORGE DIMAKARAKOS
CIVIL
No. 41287
REGISTERED PROFESSIONAL ENGINEER

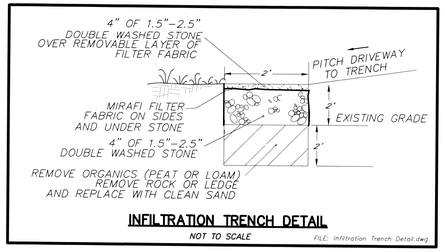
STAMSKI AND MCNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING - PLANNING - SURVEYING

0 10 20 40 60 80 FT

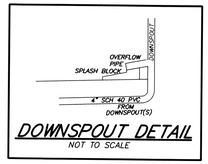


NOTES
1. ALL GRAVEL IS TO BE COMPACTED TO 95% MAX. DRY DENSITY.
2. AREA UNDER GRAVEL BASE COURSE TO BE FREE OF ORGANIC MATERIAL, TRASH, ECT. FILL WHERE REQUIRED SHALL CONFORM TO MASS. D.P.W. 1.03.c. 6" MAX. STONE
3. GRAVEL SHALL EXTREND 6" BEYOND ALL EDGE OF PAVEMENT LOCATIONS MATERIAL, TRASH, ECT. FILL WHERE REQUIRED SHALL CONFORM TO MASS. D.P.W. 1.03.c. 6" MAX. STONE

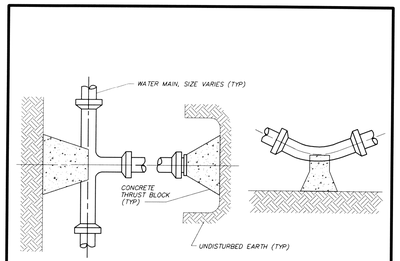
PAVEMENT DETAIL
NOT TO SCALE



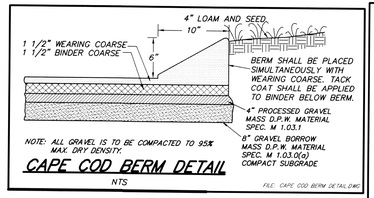
INFILTRATION TRENCH DETAIL
NOT TO SCALE
FILE: Infiltration Trench Detail.dwg



DOWNSPOUT DETAIL
NOT TO SCALE

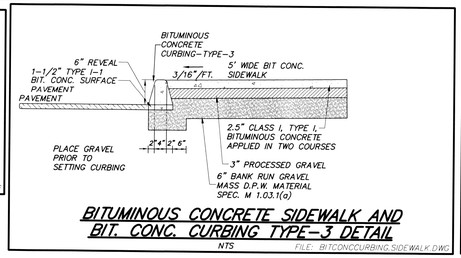


TYPICAL THRUST BLOCK DETAIL
NOT TO SCALE

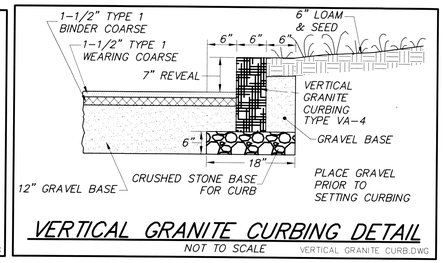


NOTE: ALL GRAVEL IS TO BE COMPACTED TO 95% MAX. DRY DENSITY.

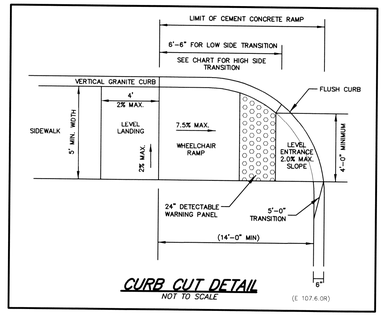
CAPE COD BERM DETAIL
NTS
FILE: CAPE COD BERM DETAIL.DWG



BITUMINOUS CONCRETE SIDEWALK AND BIT. CONC. CURBING TYPE-3 DETAIL
NTS
FILE: BITCONCCURBING.SIDEWALK.DWG

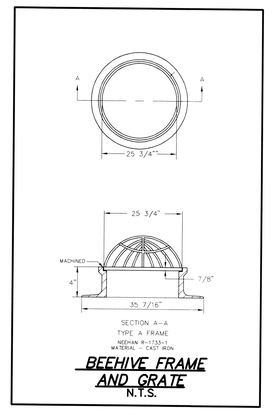


VERTICAL GRANITE CURBING DETAIL
NOT TO SCALE
VERTICAL GRANITE CURB.DWG

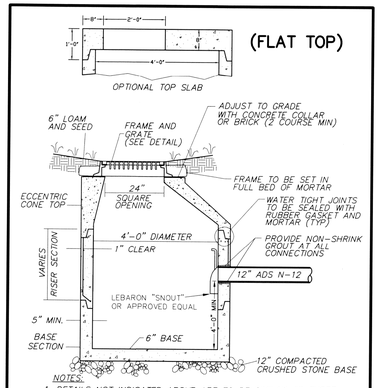


(E 107.6.0R)

CURB CUT DETAIL
NOT TO SCALE



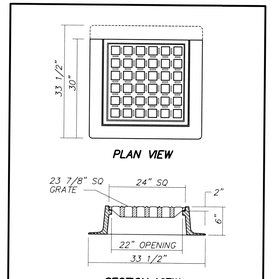
BEEHIVE FRAME AND GRATE
N.T.S.



NOTES:
1. DETAILS NOT INDICATED ABOVE ARE TO BE SIMILAR TO THOSE SHOWN ON 201.2.0 AND 201.3.0 MASS DPW STANDARDS
2. FOR DESCRIPTION, MATERIALS AND CONSTRUCTION METHOD, SEE MASS. HIGHWAY SPECIFICATIONS.

* MINIMUM DEPTH OF SUMP TO BE 4'-0"

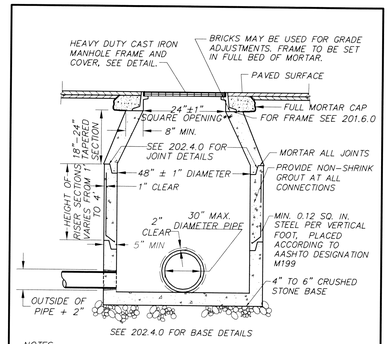
PRECAST CATCH BASIN DETAIL
NOT TO SCALE



FRAME: LEBARON LF246
GRATE: LEBARON L24SG01

FULLY MACHINED AND INTERCHANGABLE FRAMES AND COVERS.
HIGH QUALITY MATERIALS AND WORKMANSHIP.
COAL TAR EPOXY PAINTED.
NO ROCK COVERS.
H-20 LOADING RATE
3 FLANGE FRAMES TO BE USED WITH CURB INLET.

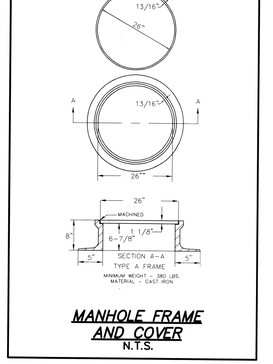
CATCH BASIN FRAME AND GRATE
NOT TO SCALE



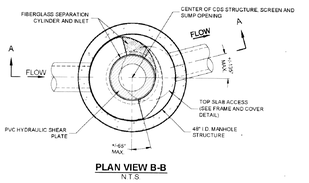
SEE 202.4.0 FOR BASE DETAILS

NOTES
1. MANHOLE TO CONFORM TO MASS. D.P.W. STANDARD 202.4.0.
2. FACE OF PIPE FLUSH OR NOT TO PROJECT MORE THAN 4" FROM FACE OF WALL ALONG CENTERLINE OF PIPE.
3. FOR DESCRIPTION, MATERIALS AND CONSTRUCTION METHOD, SEE SPECIFICATIONS.

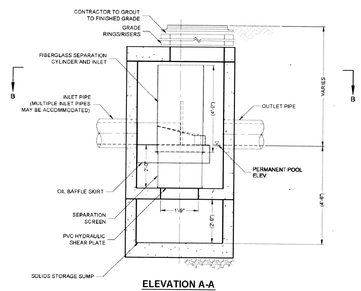
PRECAST CONCRETE MANHOLE DETAIL
NOT TO SCALE



MANHOLE FRAME AND COVER
N.T.S.



PLAN VIEW B-B
N.T.S



ELEVATION A-A
N.T.S

CDS2015-4-C DESIGN NOTES

CDS2015-4-C RATED TREATMENT CAPACITY IS 1.4 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS2015-4-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES

(DMH-2 & DMH-3)

CONTECH STORMWATER SOLUTIONS
Ocean water starts here.
conteches tormwater.com

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			*
WATER QUALITY FLOW RATE (CFS)			*
PEAK FLOW RATE (CFS)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
NOTES/SPECIAL REQUIREMENTS:			*

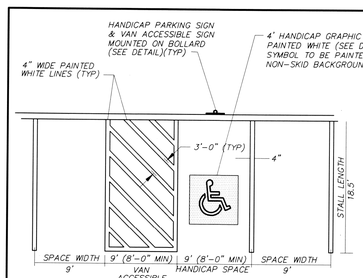
* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH [ ] ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH CONSTRUCTION PRODUCTS REPRESENTATIVE www.contech-cpi.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET CDS STANDARD NOTES AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

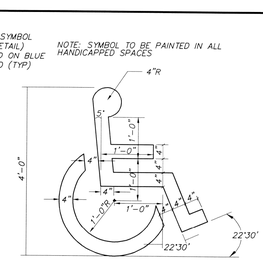
INSTALLATION NOTES
1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
3. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH CONSTRUCTION PRODUCTS INC.
www.contech-cpi.com
8005 Cooper Creek Blvd., Suite 107, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

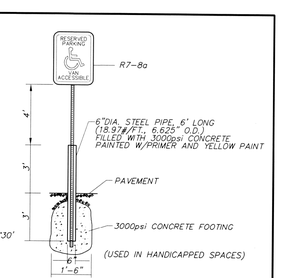
CDS2015-4-C
CDS INLINE
STANDARD DETAIL



STALL STRIPING
NOT TO SCALE



PAINTED HANDICAP SYMBOL
NOT TO SCALE



HANDICAP SIGN AND BOLLARD
NOT TO SCALE

SITE PLAN
IN
ACTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

CONSTRUCTION DETAILS
FOR: ACTON MANAGEMENT, INC.
SCALE: 1"=40' JUNE 27, 2014

STAMSKI AND MCNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING - PLANNING - SURVEYING
0 20 40 80 120 160 FT

(4860-SPC.dwg) GREAT ROAD SM-4860 Sheet 5 of 6

COMMONWEALTH OF MASSACHUSETTS
GEORGE DIMAKARAKOS
CIVIL
No. 41291
REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTES

1. ALL UNDERGROUND UTILITIES SHOWN HEREON WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGE INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG-SAFE TELE. NO. (888) 344-7233.
2. UNLESS OTHERWISE SPECIFIED ON THESE PLANS, ALL CONSTRUCTION METHODS AND MATERIALS SHALL COMPLY WITH SPECIFICATIONS OUTLINED IN THE ACTON ZONING BYLAW AND THE ACTON RULES AND REGULATIONS FOR SITE PLAN SPECIAL PERMITS.
3. ALL LIMITS OF WORK SHALL BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION OR SITE CLEARING.
4. ALL WATER PIPES, HYDRANTS, GATE VALVES AND OTHER APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE ACTON WATER SUPPLY DISTRICT REQUIREMENTS.
5. ALL STUMPS AND OTHER CONSTRUCTION DEBRIS SHALL BE PROPERLY REMOVED ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS OR WASTE.
6. ALL DRAIN PIPES SHALL BE ADS N-12 UNLESS OTHERWISE SHOWN.

7. TRANSPORTATION OF FILL, EARTH, OR CONSTRUCTION DEBRIS TO OR FROM THE SITE SHALL BE RESTRICTED TO DAYTIME HOURS (9 AM TO 4 PM) MONDAY THROUGH FRIDAY.
8. CONSTRUCTION SHALL BE IN ACCORDANCE WITH 521 CMR – ARCHITECTURAL ACCESS BOARD REGULATIONS. ALL PROPOSED SIDEWALKS SHALL HAVE A MAX. CROSS SLOPE OF 2%. THE PROPOSED HANDICAP PARKING STALLS AND ADJACENT AREAS SHALL HAVE A MAX. SLOPE OF 2% IN ALL DIRECTIONS. A WAIVER TO THE REGULATIONS MAY BE NEEDED FOR HANDICAPPED PARKING SPACE LOCATIONS AND MUST BE CONFIRMED BY OWNER OR ARCHITECT .
9. IT IS ANTICIPATED THE EXISTING SEPTIC TANKS, SOIL ABSORPTION SYSTEM, AND WATER LINE WILL BE ENCOUNTERED DURING CONSTRUCTION. THE EXISTING ONSITE SOIL ABSORPTION SYSTEM AND ASSOCIATED TANKS SHALL BE ABANDONED PURSUANT TO 310CMR 15.354 ABANDONMENT OF SYSTEMS OR REMOVED FROM SITE.
10. TURNING RADII HAS BEEN DESIGNED TO ACCOMMODATE A SU-30 VEHICLE.
11. ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS OR WASTE.
12. USE THE EXISTING GRANITE CURBING AT THE PROPOSED ENTRANCE TO FILL IN THE EXISTING ENTRANCE.

DRAINAGE SYSTEM OPERATION AND MAINTENANCE PLAN

1. BMP OWNER: ACTON MANAGEMENT, INC.
69 GREAT ROAD
ACTON, MA 01720

2. PARTIES RESPONSIBLE FOR MAINTENANCE: SAME AS ABOVE
3. SCHEDULE FOR INSPECTION AND MAINTENANCE:

DEEP SUMP AND HOODED CATCH BASIN:
THE DEEP SUMPS FOR THE CATCH BASINS SHALL BE INSPECTED AND CLEANED QUARTERLY. THE CATCH BASINS HAVE A FOUR FOOT DEEP SUMP AND THE WATER LEVEL IS MAINTAINED BY THE DISCHARGE PIPE AT FOUR FEET. THE DISCHARGE PIPE IS HIDDEN FROM VIEW BY A HOODED OUTLET.

THE DEPTH OF THE SEDIMENT IN THE BASIN SHALL NOT EXCEED A DEPTH OF 18 INCHES AS DETERMINED BY PROBING WITH A STICK. IF THE STICK HITS THE BOTTOM WITHIN 30 INCHES OF THE WATER LEVEL, MORE THAN 18 INCHES OF SEDIMENT HAS ACCUMULATED AND MUST BE REMOVED. LICENSED PERSONS SHOULD REMOVE AND DISPOSE OF THE CONTENTS OF THE SUMP IN ACCORDANCE WITH APPLICABLE REGULATIONS.

VORTSENTRY HS
INSPECTION AND MAINTENANCE OF THE IVORTSENTRY HS CAN BE PERFORMED FROM THE SURFACE, WITHOUT ENTRY INTO THE UNIT. PERFORM MAINTENANCE A MINIMUM OF TWICE PER YEAR. THE VORTSENTRY HS SHOULD BE CLEANED ONCE THE SEDIMENT HAS REACHED A DEPTH OF TWO FEET IN THE CHAMBER.
PERFORM FREQUENT INSPECTIONS DURING THE FIRST YEAR OF INSTALLATION TO ACCURATELY ESTABLISH THE MAINTENANCE SCHEDULE.
REMOVE OIL AND SEDIMENT THROUGH THE MANHOLE COVER WITH THE USE OF A VACCUUM TRUCK.

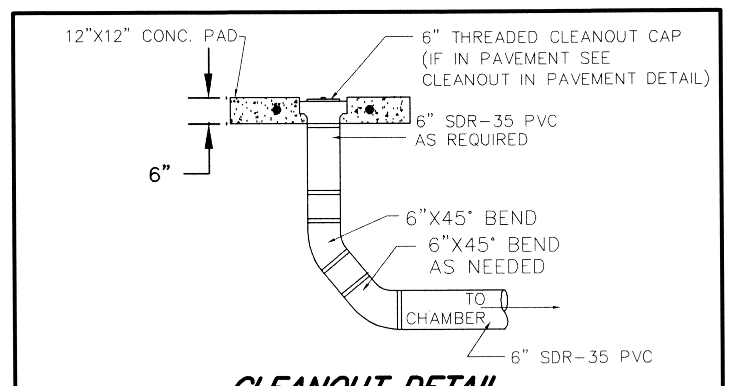
DISPOSAL FROM THE VORTSENTRY HS ARE SIMILAR TO THAT OF ANY OTHER BEST MANAGEMENT PRACTICE (BMP). CONSULT LOCAL GUIDELINES OR YOUR VORTSENTRY HS AREA MARKETING MANAGER PRIOR TO DISPOSING THE SEPARATOR CONTENTS.

SUBSURFACE RECHARGE AREAS:

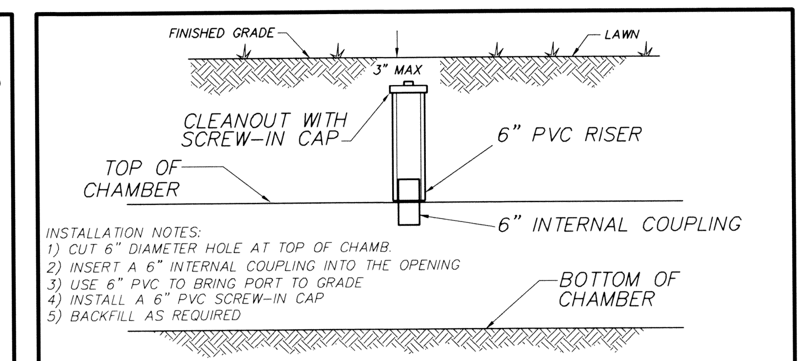
THE INFILTRATION BED CLEANOUTS SHALL BE OPENED AND INSPECTED ANNUALLY. IF THE WATER LEVEL IS MORE THAN 24 INCHES ABOVE THE BOTTOM OF STONE ELEVATION, THE CHAMBERS SHALL BE FLUSHED WITH A PRESSURE HOSE, AND IF AFTER 24 HOURS THE WATER LEVEL HAS NOT DROPPED, THE INFILTRATION BED MAY HAVE TO BE REPLACED. (NOTE: THE RELATIVE ELEVATIONS OF CLEANOUT RIMS AND THE BOTTOM OF STONE SHALL BE TAKEN FROM THE SITE PLAN AS-BUILT. THIS INSPECTION SHULD NOT BE DONE WITHIN 72 HOURS OF A RAIN EVENT.)

EMERGENCY CONTACTS:
IN THE EVENT OF A HAZARDOUS MATERIALS SPILL ON THE SITE THE FOLLOWING PARTIES SHALL BE CONTACTED: FIRE DEPARTMENT: PH: 978-264-9645

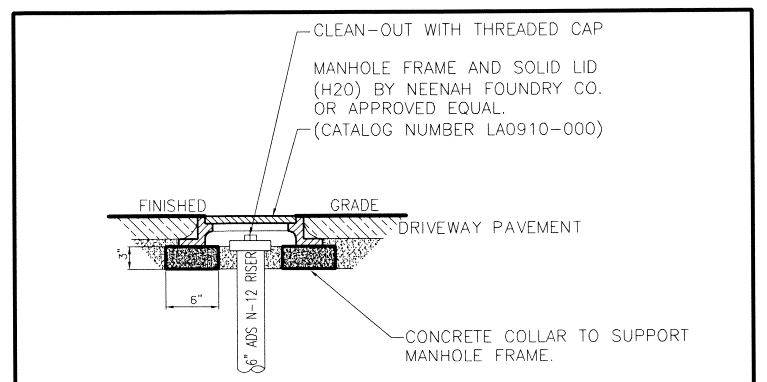
RECORDS:
THE OWNER SHALL MAINTAIN AN INSPECTION LOG OF ALL ELEMENTS OF THE STORM WATER MANAGEMENT PLAN. THE OWNER SHALL MAINTAIN A MAINTENANCE LOG DOCUMENTING THE INSPECTION AND MAINTENANCE OF THE DRAINAGE STRUCTURES UNDER HIS CONTROL. A COPY OF THE EROSION CONTROL AND STORM WATER MAINTENANCE PLAN AND INSPECTION LOGS SHALL BE KEPT ONSITE AT ALL TIMES.



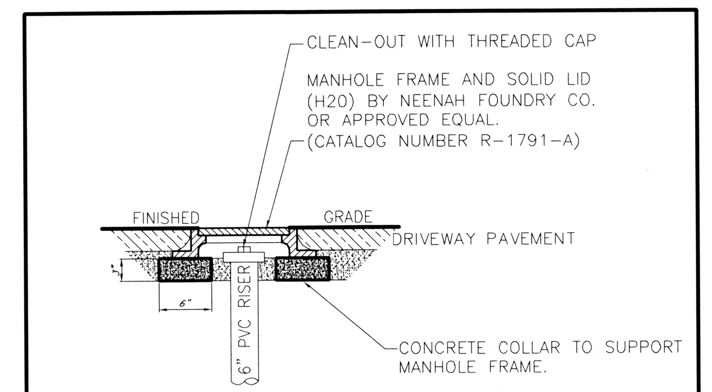
CLEANOUT DETAIL
NOT TO SCALE



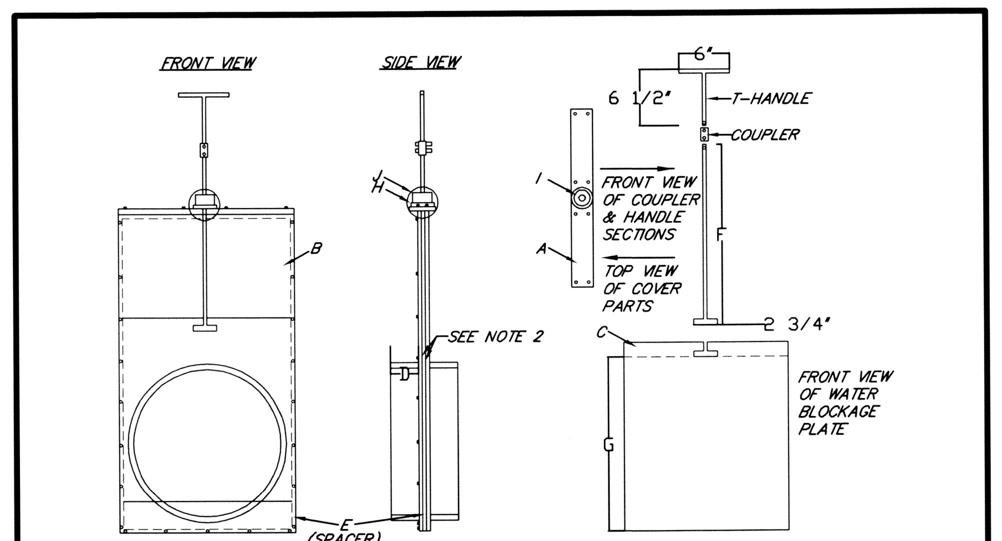
INSPECTION PORT DETAIL
N.T.S.



CLEANOUT IN PAVEMENT DETAIL
N.T.S.



INSPECTION PORT IN PAVEMENT DETAIL
N.T.S.



	A	B	C	D	E	F	G	H	I	J
10"	3" X 13 1/4"	13" X 22 1/2"	13 3/4" X 11 3/4"	3"	5/8"	16"	11 3/4"	1/2" PVC CIRCLE 2 3/4" THREADED	1/2" CPVC MALE ADAPTOR	2" PVC DWV X 1 1/4"
12"	3" X 15 1/4"	15" X 26 1/2"	15 1/2" X 13 3/4"	3"	5/8"	16"	13 1/2"			
15"	3" X 18"	17 3/4" X 32"	18 3/4" X 16 1/2"	3"	5/8"	19 1/4"	16 3/4"			
18"	3" X 21 3/8"	21 1/8" X 38 3/4"	19 7/8" X 22"	3"	5/8"	22"	20"			

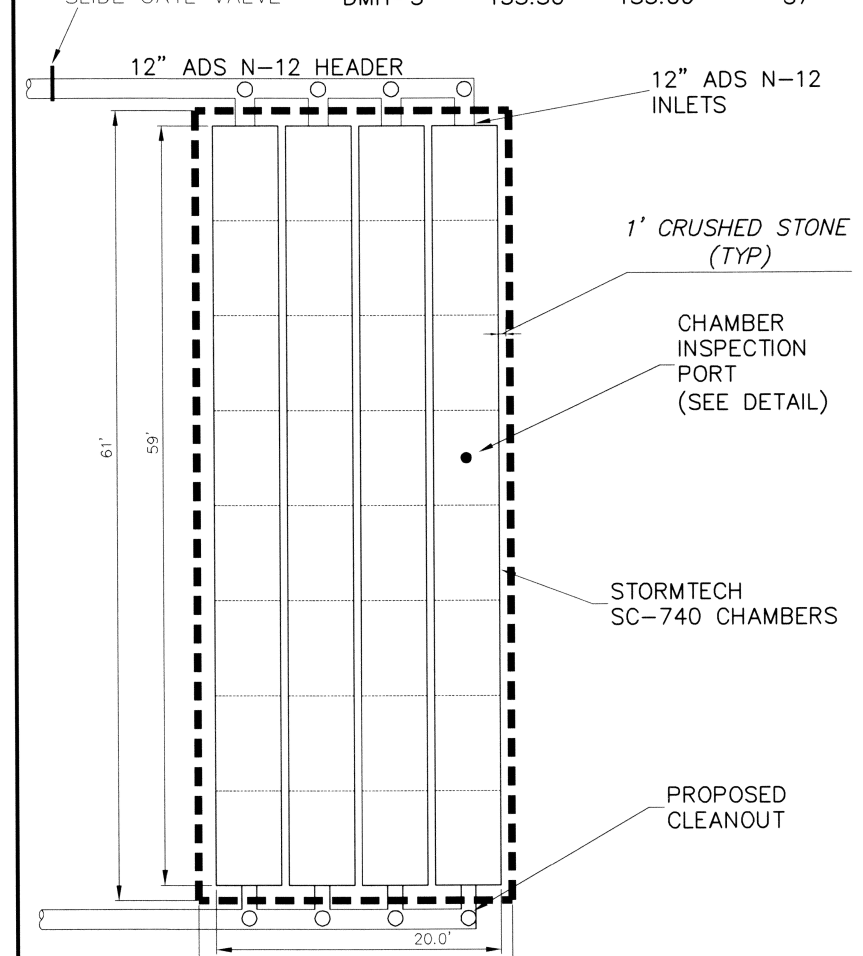
*ALL PVC MATERIAL IS 1-2" THICK.
**STUBS ARE SDR 35 PVC MALE.

NOTES
1. PROPOSED AGRI DRAIN SLIDE GATE VALVE TO BE INSTALLED IN INF. BASINS #6 AND #7 IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. CONTACT AGRI DRAIN AT1-800-232-4742.
2. FLEXIBLE RUBBER SEALS AROUND OPENINGS ON BOTH FRONT AND BACK COVER, CREATE A WATER TIGHT SEAL AGAINST THE SLIDING WATER BLOCKAGE PLATE.
3. SLIDE GATE VALVE TO BE ATTACHED TO 12" ADS DRAIN PIPE WITH A FLEX COUPLER AS MANUFACTURED BY FERNCO. PH. 1-800-521-1283.

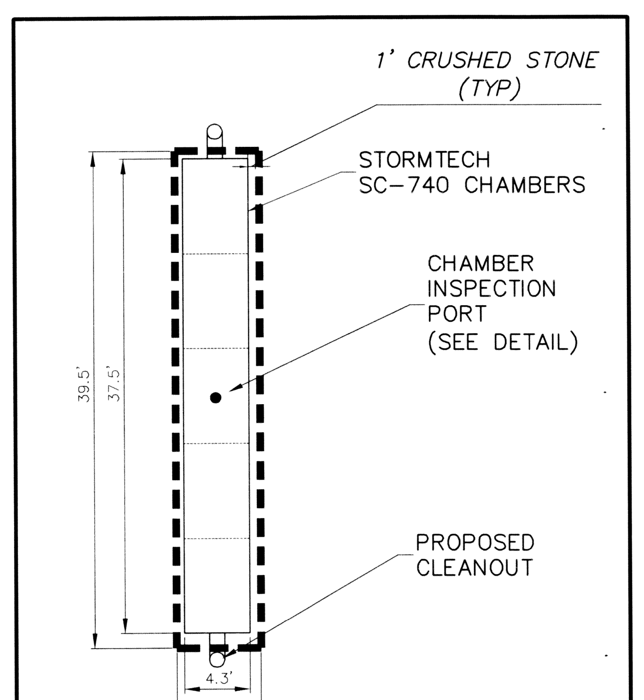
SLIDE GATE DETAIL
N.T.S.

SUBSURFACE RECHARGE AREA SCHEDULE

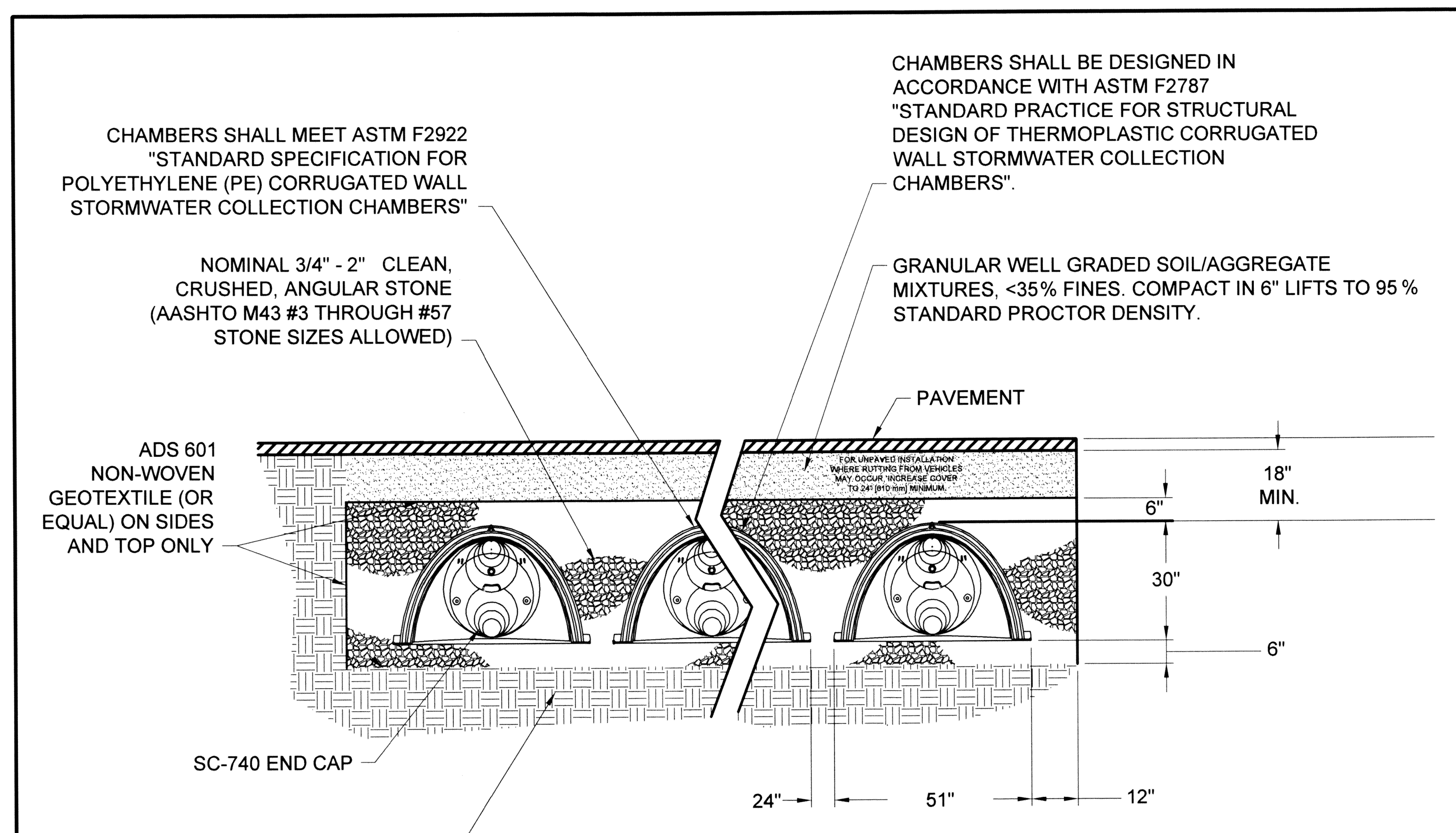
	INLET FROM	INLET INVERT	BOTTOM STONE	TOTAL CHAMBER LENGTH
	DMH-2 & DMH-3	153.50	153.00	57'



SUBSURFACE RECHARGE AREA DETAIL
NOT TO SCALE



ROOF RUNOFF SUBSURFACE RECHARGE AREA DETAIL
NOT TO SCALE

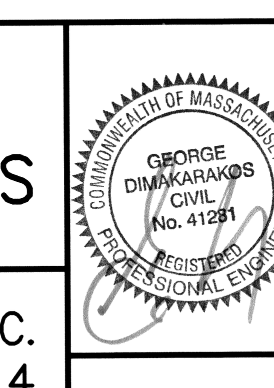


THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.

SC-740 TYPICAL CROSS-SECTION

SITE PLAN
IN
ACTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

CONSTRUCTION DETAILS
FOR: ACTON MANAGEMENT, INC.
SCALE: 1"=40' JUNE 27, 2014



STAMSKI AND MCNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING – PLANNING – SURVEYING
0 20 40 80 120 160 FT

(4860-SPC.dwg) GREAT ROAD SM-4860 Sheet 6 of 6

General Notes

1. All site information represented on this plan is illustrative, and must be verified by the contractor. Written specifications shall take precedence over representations on drawings.

2. It is contractor's responsibility to become apprised of existing conditions, underground utilities, and overhead utilities. Coordination with all relevant companies or agencies, including permitting & Dig Safe, affected by this construction is contractor's responsibility. The contractor is required to obtain any necessary permits required from local authorities for all work in this contract.

3. Contractor shall be responsible for on-site safety of construction crew, and particularly of safety of pedestrians during period of construction project.

4. Extreme care shall be taken not to disturb existing plant materials, except those specifically noted to be transplanted or removed. Any plant injured or destroyed shall be replaced with a plant of equal or greater size and species at the contractor's expense.

6. All unused materials that are movable shall be removed from site daily, or stored in such a way as to preclude loss or vandalism.

7. All debris shall be removed, and all walks made free of obstructions, and site left in a neat, clean condition at the close of each workday.

Planting Notes

1. The Contractor shall locate and verify all utilities prior to starting work.

2. The Contractor shall supply all plant materials in quantities sufficient to complete the planting shown on all Drawings. Plant counts are for convenience only. Contractor shall use sufficient plant materials to fulfill design intent, but in no case shall contractor use fewer plants than listed.

3. All material shall conform to the guidelines established by the "American Standard for Nursery Stock", published by the American Association of Nurserymen.

4. Contractor shall test soil in all plant areas and shall amend the soil as needed. Hard packed soil may need to be removed and replaced with rich, organic loam. The contractor shall grade and blend new earthwork smoothly with existing contours. Fine grading must be accepted by the Owner's rep before planting begins.

5. All plants shall bear the same relationship to finished grade as original grade before digging. Plants to be transported shall be dug carefully, with adequate rootballs and pruned according to ANA standard practice.

6. All plants shall be balled in burlap or containerized, unless specified otherwise. All trees and shrubs shall be balled in burlap. No root bound container grown stock will be accepted. All plastic root wrapping and metal wire baskets shall be carefully removed at the time of planting, except that wire that is directly under the rootballs.

7. All plant materials are subject to the approval of the Landscape Architect at the nursery and at the site. No unapproved substitutions will be accepted. All trees shall have a single leader unless specified otherwise.

8. Trees, shrubs and perennials shall be laid out on site according to the Planting Plan for the approval of the project Landscape Architect. Layout shall be completed prior to arrival of the Landscape Architect. Notify Landscape Architect at least 4 days prior to anticipated date of layout. Coordinate layout and planting dates/times with Landscape Architect.

9. Set plants and stakes plumb. The Contractor is responsible for providing planting soil for backfilling of all plants. Submit written content analysis to Owner/Rep. for approval

9. Flood plants thoroughly once immediately after planting and twice during the first twenty-four hour period after planting. The Contractor shall maintain the plants for a minimum of 30 days following installation, or longer if contracted by the Owner. Before the end of the 30day period, the contractor shall provide a written maintenance outline to the Owners and the Contractor shall be available to answer questions or concerns at that time.

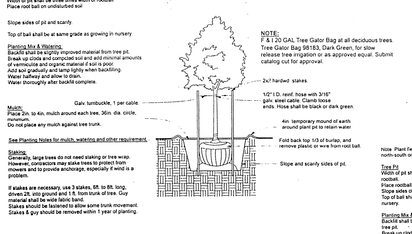
10. Mulch: Contractor shall place 2" - 3" of shredded leaf mulch throughout the plant bed areas and around the base of each new tree (30" diameter mulch bed, approximately). DO NOT PLACE MULCH AGAINST TREE TRUNKS. Submit sample of mulch for approval.

11. All trees and shrubs shall be sprayed with anti-dessicant within twenty-four hours after planting. All plants to be sprayed with an anti-dessicant the first week of November the first winter following planting.

12. All plants shall be guaranteed for a minimum of one year from the date of final acceptance of planting by the Landscape Architect. Contractor shall replace, at his/her own expense, any dead or diseased plants, or any plant material deemed by the Landscape Architect to be in poor condition.

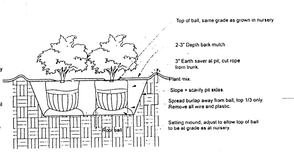
13. For lawn areas—contractor shall submit seed mix for approval and shall discuss installation methods and procedures with Landscape Architect and/or Owner's rep. prior to construction.

14. All plants shall be guaranteed for a minimum of one year from the date of final acceptance of planting by the Landscape Architect. Contractor shall replace, at his/her own expense, any dead or diseased plants, or any plant material deemed by the Landscape Architect to be in poor condition.



NOTE:
F & I 20 GAL Tree Gator Bag at all deciduous trees.
Tree Gator Bag 88183, Dark Green, for slow release tree irrigation or as approved equal. Submit catalog cut for approval.

Deciduous Tree Planting Detail
NOT TO SCALE

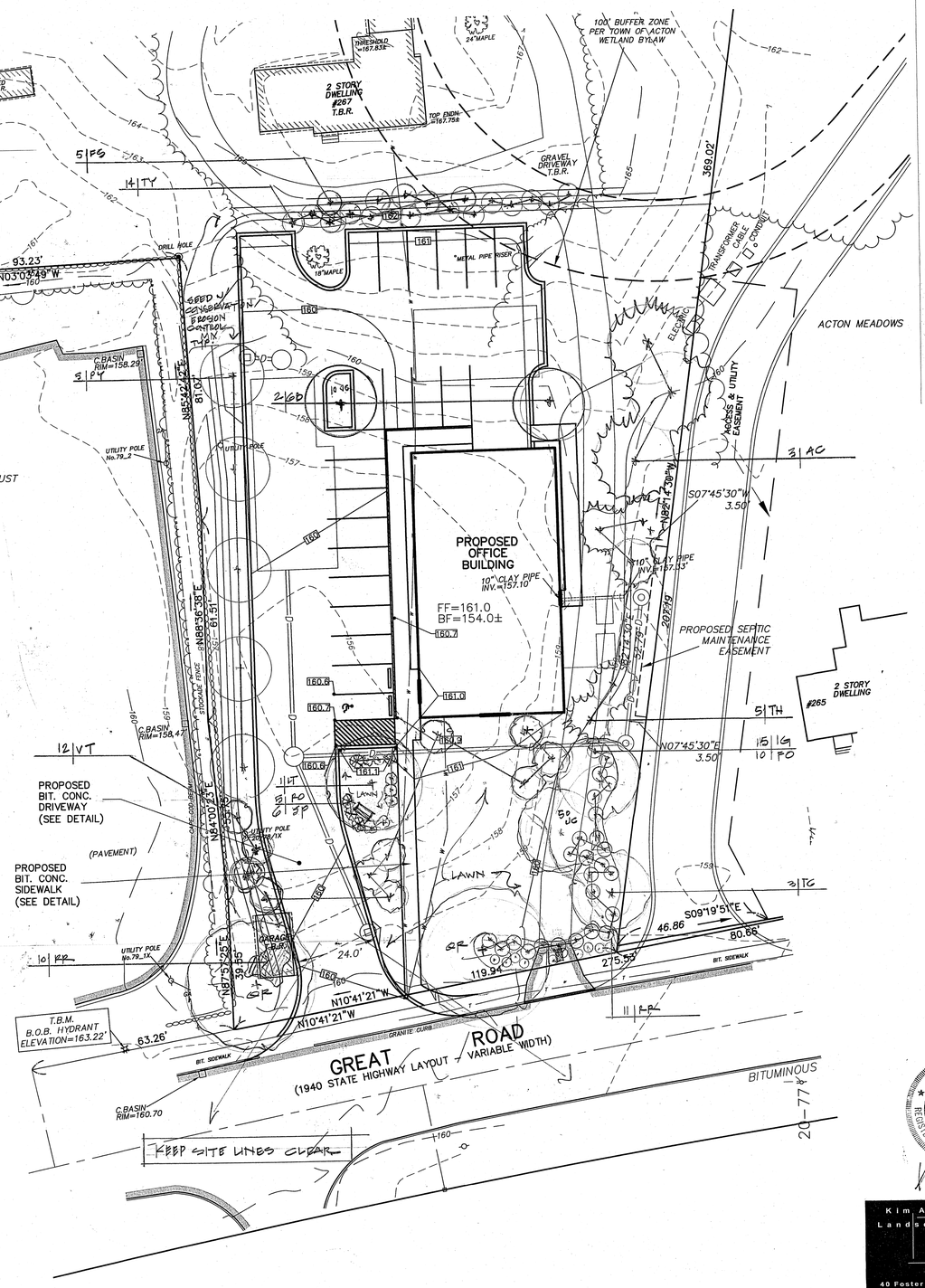


Shrub Planting Detail
NOT TO SCALE

Coniferous Tree Planting Detail
NOT TO SCALE

UTILITY NOTE:

ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG SAFE TELEPHONE No. 1-888-344-7233.



PLANT LIST

Symbol/Botanical Name	Common Name	No.	Size	Remarks
Deciduous Trees (all trees shall have a single leader unless noted otherwise)				
TC/Carpinus caroliana	American Hornbeam	9	2-2.5"C	May sub. Tillia tomentosa 'Sterling'
GB/Ginkgo biloba	Ginkgo	2	2-2.5"C	
LT/Liriodendron Tulipenifera	Tuliptree	1	2-2.5"C	Specimen shape — May sub. Shumard
PY/Pyrus calleryana "Aristocrat'	Aristocrat Flowering Pear	5	2-2.5"C	Matching
QR/Quercus rubra	Red Oak	2	2.5-3"C	Matching
Evergreen Trees				
AC/Abies concolor	White Fir	3	6-7'Ht	
TH/ Thuja 'Green Giant'	Green Giant Arborvitae	6	7-8'Ht	
Shrubs				
FO/Fothergilla gardenii	Dwarf Fothergilla	10	24-30"Ht	White fls early May; specimen plants
FS/Forsythia 'Lynnwood Gold'	Lynnwood Gold Forsythia	5	3-4"Ht	
IG/Ilex crenata 'Green Luster'	Green Luster Holly	15	18-24"Ht	Matching, full plants; evergreen
RO/Rhododendron 'Olga Mezitt'	Olga Mezitt Rhododendron	5	2.5-3'Ht	Loose, open form; matching
RR?Rosa rugosa	Rugosa Rose	11	18-24"Ht	
SW/Spirea x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	6	18-24"Ht	Full; matching, CG acceptable
TY/Rhus aromatica 'Grow Low'	Grow Low Sumac	14	#2 pot	
VT/Viburnum p.t. 'Shasta'	Shasta Viburnum	12	#7 pot	Full; matching
Groundcover				
JC/Juniperous conferta 'Blue Pacific'	Blue Pacific Juniper	60	1 Gal	6-12"Ht Groundcover
Lawn—Grass seed mix for areas as shown on the plan	(Sun or semi shade mix as appropriate)			
Slope/disturbed areas—Conservation/erosion control	mix			

MASSACHUSETTS KIM L. AHERN REGISTERED LANDSCAPE ARCHITECT NO. 742

Kim Ahern
Landscape Architects
40 Foster Street
Littleton, Massachusetts 01460
Telephone 978.486.0040

SITE PLAN
IN
ACTON, MASSACHUSETTS
(MIDDLESEX COUNTY)

LANDSCAPE PLAN
FOR: ACTON MANAGEMENT, INC.
SCALE: 1"=20' JUNE 3, 2014

STAMSKI AND MCNARY, INC.
1000 MAIN STREET ACTON, MASSACHUSETTS
ENGINEERING - PLANNING - SURVEYING

0 10 20 40 60 80 FT

(4860-SPC.dwg) GREAT ROAD SM-4860