IN MEMORY OF STEPHEN J. O'CONNELL

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD (ROUTE 20)

OXFORD, MASSACHUSETTS

MAP 3, BLOCK A, PARCEL 05 & MAP 6, BLOCK A, PARCEL 01

OWNER / APPLICANTS:

OXFORD RESERVE, LLC

MAP 3, BLOCK A, PARCEL 05
997 Millbury Street, Worcester, MA 01607
P: 508-647-1919

ROUTE 2028, LLC

MAP 6, BLOCK A, PARCEL 01
997 Millbury Street, Worcester, MA 01607
P: 508-647-1919

CIVIL ENGINEERING & LAND SURVEYING:

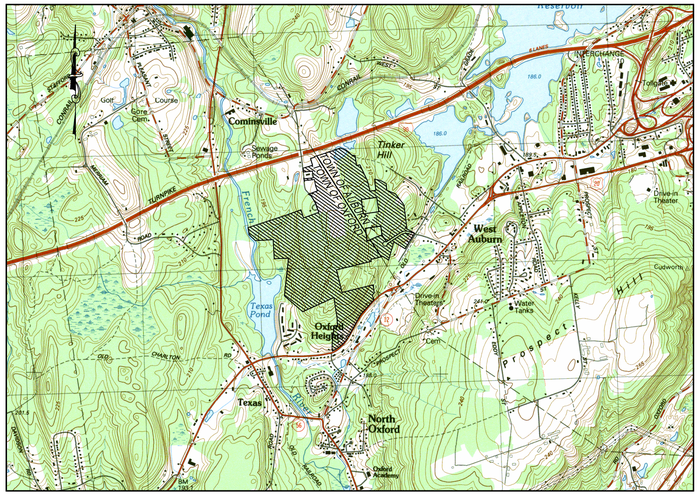
TURNING POINT ENGINEERING

P.O. BOX 757, SUTTON, MA 01590
P: 508-381-1515

WETLANDS CONSULTANT:

B & C ASSOCIATES

2 RICE STREET, HUDSON, MA 01749
P: 978-568-0135



LOCUS MAP
SCALE: 1" = 2,000'

SHEET TITLE	SHEET NUMBER
COVER SHEET VOLUME I	C-0.1
GENERAL NOTES, ABBREVIATIONS & LEGEND	C-1.0
PROPOSED CONDITIONS SHEET INDEX	C-2.0
EXISTING CONDITIONS SHEET INDEX AND PLANS	C-3.0 - C-3.14
LAYOUT & MATERIALS PLAN	C-4.1 - C-4.10
GRADING & DRAINAGE PLAN	C-5.1 - C-5.10
EROSION CONTROL PLAN	C-6.1 - C-6.10
EROSION CONTROL PLAN, NOTES & DETAILS	C-6.11 - C-6.12
COVER SHEET VOLUME II	C-0.2
UTILITY PLANS & ROAD PROFILES	C-7.1 - C-7.15
CONSTRUCTION DETAILS	C-8.1 - C-8.7
LANDSCAPE PLANS & DETAILS	C-9.0 - 9.4
PHASING PLAN	C-10.0

ZONING INFORMATION TABLE -OXFORD, MA

#0 ASHWORTH DRIVE

ASSESSOR'S MAP ID: MAP 3 LOT A05
EXISTING ZONE: MULTI-FAMILY R-4
EXISTING USE: VACANT - UNDEVELOPED
PROPOSED USE: DUPLEX (MULTI-FAMILY)

EXISTING ZONING REQUIREMENTS	REQUIRED	EXISTING	PROPOSED
LOT SIZE (MIN.)	20,000 S.F.	6,592,421± ft.(151.3 ± Acres)	6,602,924 SF± ft.(151.6 ± Acres)
FRONTAGE	100 FT.	360.79 +/- FT. (ASHWORTH)	360.79 FT.
LOT WIDTH (MIN.)	100'	N/A	VARIES >100 FT.
FRONT SETBACK	50 FT.	N/A	VARIES > 50FT
SIDE SETBACK	20 FT.	N/A	36 FT.
REAR SETBACK (MIN.)	25 FT.	N/A	36- FT.
MAX. BLDG. HEIGHT	35'	N/A	<35FT
BUILDING COVERAGE (MAX.)	30%	N/A	13.26% (875,800 SF)
PARKING SET BACK TO PROPERTY LINE	TBD	N/A	--FT.
PARKING REQUIRED	2/UNIT	N/A	4/UNIT + CLUB HOUSE
LANDSCAPE BUFFER REQUIRED	50 FT FROM LOT IN RES. USE	N/A	>50FT

ZONING INFORMATION TABLE -OXFORD, MA

#191 SOUTHBRIDGE ROAD

ASSESSOR'S MAP ID: MAP 6 LOT A01
EXISTING ZONE: GENERAL BUSINESS (GB)
EXISTING USE: VACANT - UNDEVELOPED
PROPOSED USE: PAD READY SITE

EXISTING ZONING REQUIREMENTS	REQUIRED	EXISTING	PROPOSED
LOT SIZE (MIN.)	TBD BY PLANNING	1,089,521± ft. 25.0 ± Acres)	1079018± ft.(24.8 ± Acres)
FRONTAGE	20 FT.	N/A	N/A
LOT WIDTH (MIN.)	20'	N/A	N/A
FRONT SETBACK	50 FT. FROM C.L RT 20	N/A	N/A
SIDE SETBACK	5 FT.	N/A	N/A
REAR SETBACK (MIN.)	5 FT.	N/A	N/A
MAX. BLDG. HEIGHT	35'	N/A	N/A
BUILDING COVERAGE (MAX.)	TBD BY PLANNING	N/A	N/A
PARKING SET BACK TO PROPERTY LINE	N/A	N/A	N/A
PARKING REQUIRED	N/A	N/A	N/A

OWNERS OF RECORD:	OXFORD ASSESSORS INFORMATION:	DEED REFERENCES:	PLAN REFERENCES:
OXFORD RESERVE, LLC. 997 MILLBURY STREET WORCESTER, MA 01607	MAP 3, BLOCK A, PARCEL 05 TOTAL AREA: 151.341± ACRES	BK. 56737, PG. 255	P.B. 840, PL. 83
ROUTE 2028, LLC. 997 MILLBURY STREET WORCESTER, MA 01607	MAP 6, BLOCK A, PARCEL 01 TOTAL AREA: 25.782± ACRES	BK. 58239, PG. 126	P.B. 641, PL. 70

PROPERTY INFORMATION

TURNING POINT ENGINEERING
CIVIL SITE DESIGN
P.O. Box 757 • Sutton, MA 01590
P:(508) 381-1515 F:(508) 647-0189
www.tpecivildesign.com

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO. TPE-1001D
DESIGNED BY JAB, TRB
CHECKED BY JAB
DATE NOVEMBER 15, 2024
CAD FILE H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO. L-458

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER
P.E.

SHEET TITLE
COVER SHEET

DRAWING ISSUED FOR:
■ PERMIT

THIS PLAN IS INTENDED TO SHOW CONSTRUCTIBILITY AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.

SHEET NO.
C-0.1

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-19-24 6:40:31 AM - LAYOUT C0.1

GENERAL NOTES

PART 1 – TOPOGRAPHIC AND PROPERTY LINE INFORMATION

1. NOTICE TO CONTRACTOR: THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

2. PROPERTY LINE AND TOPOGRAPHY:

- EXISTING TOPOGRAPHIC INFORMATION BASED UPON AERIAL TOPOGRAPHIC MAPPING AND ON THE GROUND SURVEY.

3. WETLAND DELINEATION BY B&C ASSOCIATES, ANRAD ISSUED JULY 14, 2022 – OXFORD CONSERVATION COMMISSION

4. DATUM: NAVD 88

5. COORDINATE SYSTEM: MASSACHUSETTS STATE PLANE 83

6. CONSTRUCTION STAKING CONTROL: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY TO PERFORM THE WORK.

7. FLOODPLAIN: THE PROPERTY DOES NOT LIE IN A FLOOD HAZARD AREA OR 100–YEAR FLOODPLAIN ACCORDING TO THE MOST RECENT FLOOD INSURANCE RATE MAP #25027C0792F, EFFECTIVE 6/21/23.

PART 2 – EXECUTION

2.1 DEMOLITION, SEDIMENTATION, AND EROSION CONTROL

A. THE FIRST STAGE INVOLVES ACTIVITIES NEEDED TO ADDRESS STORMWATER MANAGEMENT, EXCAVATING MATERIAL DESIGNATED FOR OFF–SITE REMOVAL OR ON–SITE RELOCATION AND FENCING SELECTED AREAS. STAGE ONE WILL PREPARE SITE FOR CONVENTIONAL CONSTRUCTION.

B. THE SECOND STAGE WILL CONSIST OF ROUTINE CONSTRUCTION INVOLVING BUILDING, PAVING, LANDSCAPING, AND UTILITIES.

C. THERE ARE GENERAL PHASES OF CONSTRUCTION. IN EACH PHASE OF CONSTRUCTION, IMPLEMENT STANDARD EROSION AND SEDIMENT CONTROL PRACTICES PRIOR TO INITIATING EARTH DISTURBING ACTIVITIES, AND MAINTAIN THESE PRACTICES THROUGHOUT THE COURSE OF CONSTRUCTION.

D. DURING DEMOLITION, EXCAVATIONS AS MUCH AS 20 FEET MAY BE REQUIRED FOR THE INSTALLATION OF FOUNDATIONS, RETAINING WALLS, AND UTILITIES. EXCAVATIONS SHALL BE CUT TO A STABLE SLOPE OR BE TEMPORARILY BRACED, DEPENDING ON THE EXCAVATION DEPTHS AND THE ENCOUNTERED SUBSURFACE CONDITIONS. THE CONTRACTOR MAY BE REQUIRED TO SUBMIT EXCAVATION AND SLOPE STABILIZATION METHODS PRIOR TO THE START OF CONSTRUCTION TO THE ENGINEER FOR REVIEW.

E. BASED ON THE COMPOSITION OF SOILS ENCOUNTERED DURING THE EXPLORATION PROGRAM, SITE SOILS ARE GENERALLY CLASSIFIED AS TYPES B, C, AND D SOILS AS DEFINED BY (USGS) NATIONAL RESOURCES CONSERVATION SERVICE (NRCS), FORMERLY SOIL CONSERVATION SURVEY (SCS). TEMPORARY CONSTRUCTION SLOPES SHOULD BE DESIGNED IN STRICT COMPLIANCE WITH THE MOST RECENT GOVERNING REGULATIONS. STOCKPILES SHOULD BE PLACED WELL AWAY FROM THE EDGE OF THE EXCAVATION AND THEIR HEIGHT SHOULD BE CONTROLLED TO PREVENT SURCHARGE TO THE SIDES OF THE EXCAVATION. SURFACE DRAINAGE SHOULD BE CONTROLLED TO AVOID FLOW OF SURFACE WATER INTO THE EXCAVATIONS.

F. CONSTRUCTION SLOPES SHOULD BE REVIEWED FOR MASS MOVEMENT. IF POTENTIAL STABILITY PROBLEMS ARE OBSERVED, WORK SHOULD CEASE AND A GEOTECHNICAL ENGINEER SHOULD BE CONTACTED IMMEDIATELY. THE RESPONSIBILITY FOR EXCAVATION SAFETY AND STABILITY OF TEMPORARY CONSTRUCTION SLOPES SHOULD LIE SOLELY WITH THE CONTRACTOR.

2.2 – TYPICAL PRACTICES TO BE APPLIED TO THE SITE INCLUDE THE FOLLOWING:

A. PRIOR TO EARTH DISTURBANCE IN ANY WORK AREA, INSTALL EROSION CONTROL BARRIERS BETWEEN THE WORK AREA AND THE SURFACE WATER RESOURCE TO WHICH IT DRAINS.

B. DISCHARGE WATER FROM DEWATERING OPERATIONS TO A TEMPORARY SILTATION TRAP OR SEDIMENTATION BASIN.

C. PROVIDE TEMPORARY BERMS AND SWALES TO DIVERT SURFACE WATER AWAY FROM THE AREAS THAT WILL BE EXPOSED BY CONSTRUCTION ACTIVITY TO MINIMIZE THE AMOUNT OF SURFACE WATER COMING INTO CONTACT WITH EXPOSED SOILS. PROVIDE STABLE OUTLETS FOR THESE DEVICES, AND LINE OR VEGETATE THESE DIVERSIONS TO PROVIDE FOR THEIR STABILITY DURING CONSTRUCTION.

D. LIMIT THE EXTENT OF EXPOSED SOILS TO AREAS THAT CAN BE WORKED AND RESTABILIZED WITHIN THE CONSTRUCTION SEASON AND DURING THE SPECIFIC CONSTRUCTION PHASE.

E. WHEN EARTHWORK CONSTRUCTION ACTIVITY IN AN AREA IS COMPLETE, STABILIZE THE AREA WITH A SUITABLE SURFACE AS DESCRIBED BELOW.

F. IN ADDITION TO THESE PRACTICES, FOLLOW THE SPECIAL PRACTICES DESCRIBED BELOW. COMPLY WITH THE DIRECTIONS OF THE APPLICANT'S REPRESENTATIVE TO ADDRESS EROSION AND SEDIMENTATION CONDITIONS THAT MAY ARISE ON A CASE BY CASE BASIS DURING CONSTRUCTION.

G. THE FOLLOWING IS A DESCRIPTION OF MINIMUM CONSTRUCTION REQUIREMENTS AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES WITH REGARD TO DETERMINING THE ADEQUACY OF MEANS AND METHODS OF CONSTRUCTION.

2.3 – CONSTRUCTION SEQUENCING

A. SEQUENCING SHALL BE AS SHOWN ON THE PLAN AND AS DICTATED BY THE REQUIREMENTS OF CONSTRUCTION.

2.4 – MAINTENANCE

A. DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED:

B. SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATION ESTABLISHMENT.

C. TEMPORARY SEDIMENTATION BASINS WILL BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN STORAGE CAPACITY.

D. TEMPORARY DRAINAGE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY.

E. THE EROSION CONTROL BARRIERS AND OTHER EROSION AND SEDIMENT CONTROL MEASURES/DEVICES SHALL BE INSPECTED, CLEANED, REPLACED AND/OR REPAIRED AS NECESSARY, PERIODICALLY AND AFTER EACH SIGNIFICANT RAINFALL.

F. SWEEP ON–SITE PAVED AREAS AND OFF–SITE STREETS AS NECESSARY TO PREVENT SILT AND DEBRIS ORIGINATING ON–SITE FROM ENTERING CLOSED DRAINAGE SYSTEMS AND/OR ENVIRONMENTALLY SENSITIVE AREAS. WHEN NECESSARY UTILIZE WATER SPRAYING, SURFACE ROUGHENING AND/OR APPLY POLYMERS, SPRAY–ON TACKIFIERS, CHLORIDES AND BARRIERS FOR DUST CONTROL.

2.5 – GENERAL

A. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS, FORMERLY SCS) GUIDELINES AND ALL LOCAL, COUNTY AND MUNICIPAL REGULATIONS.

B. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTHWORK OPERATIONS, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUNDCOVER IS ESTABLISHED.

C. ALL WORK SHALL BE IN ACCORDANCE WITH THE PERMITS AND APPROVALS ISSUED AND THE CONSTRUCTION SPECIFICATIONS. BLASTING IS PROHIBITED ON THE PROJECT SITE.

D. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED STRAW WATTLES AND/OR SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION.

E. TOPS OF STOCKPILES SHALL BE COVERED IN SUCH A MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.

F. ALL DISTURBED OR EXPOSED AREAS SHALL BE PERMANENTLY STABILIZED WITHIN FIVE (5) BUSINESS DAYS OF COMPLETION OF CONSTRUCTION OF A GIVEN AREA. EXPOSED AREAS WHERE NO WORK HAS OCCURRED FOR FOURTEEN (14)DAYS SHALL BE TEMPORARILY STABILIZED WITH HYDROSEED OR OTHER APPROVED METHOD.

G. THE LOCATION OF TEMPORARY DRAINAGE SWALES AND SEDIMENTATION TRAPS ARE APPROXIMATE ONLY AND SHALL BE RELOCATED AS REQUIRED AS CONSTRUCTION PROGRESSES.

H. HAYBALE DIKES SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS LOCATED IN FILL AREAS & SUBJECT TO STORMWATER RUN–OFF FROM PROPOSED FILL AREAS DURING CONSTRUCTION, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. NO SEDIMENTS SHALL ENTER THE ON–SITE OR OFF–SITE DRAINAGE SYSTEMS AT ANY TIME.

I. CULVERT/PIPE INLETS AND OUTFALLS SHALL BE PROTECTED BY STRAW WATTLE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

J. EROSION CONTROLS SHALL BE PERIODICALLY INSPECTED AND REPLACED AS REQUIRED.

K. STABILIZED NON–RIPRAP SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH EXCELSIOR BLANKETS IF NECESSARY TO PROTECT FROM EROSION.

L. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL STRAW WATTLES AND EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE OR LOCAL OFFICIALS TO MITIGATE ANY EMERGENCY CONDITION.

M. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE HAULED OFF–SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS.

N. THE CONTRACTOR SHALL PROTECT AND/OR CAP OFF ALL EXISTING ON–SITE UTILITY SERVICES DESIGNATED AS SUCH ON THESE DRAWINGS.

O. THE LIMIT OF WORK LINE FOR THE AREA TO BE CLEARED AND GRUBBED SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES, (I.E., THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA).

P. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT–OF–WAY MUST BE REMOVED IMMEDIATELY.

Q. FOLLOWING THE ADDITION OF A BINDER COURSE, THE CONTRACTOR SHALL SWEEP ALL ON–SITE PAVEMENT, IF NECESSARY, UNTIL ALL SITE CONSTRUCTION IS COMPLETED.

R. THE MATERIALS AND METHODS USED IN THE CONSTRUCTION OF ROADWAYS SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN CONSTRUCTION STANDARDS AND SPECIFICATIONS. WHEN NO CITY SPECIFICATION IS PROVIDED THE MATERIALS AND METHODS USED IN THE CONSTRUCTION OF ROADWAYS SHALL CONFORM TO THE REQUIREMENTS OF "THE COMMONWEALTH OF MASSACHUSETTS, DEPARTMENT OF PUBLIC WORKS, STANDARDS & SPECIFICATIONS FOR HIGHWAYS & BRIDGES," LATEST EDITION.

PART 3 – STORM DRAINS

A. STORM DRAIN PIPING (INDICATED BY LETTER "D") SHALL BE CORRUGATED POLYETHYLENE PIPE (HDPE) AS INDICATED, PER AASHTO M294 AND M252 MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC. HDPE SHALL BE ADS N–12 PIPE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR HANCOR HI Q PIPE AS MANUFACTURED BY HANCOR, INC. OR APPROVED EQUAL.

B. STORM DRAIN MANHOLES (INDICATED BY LETTERS "DMH") SHALL BE PRECAST 4', 5' OR 6' DIAMETER CONCRETE PER ASTM C478 (AS CALLED FOR ON DRAWINGS OR FIELD CONDITIONS REQUIRE) WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C443. PIPE TO MANHOLE CONNECTIONS SHALL BE MORTARED PIPE OPENINGS.

C. CATCH BASINS (INDICATED BY LETTERS "CB") SHALL BE PRECAST 4' DIAMETER CONCRETE PER ASTM C478, (ALTERNATE TOP SLAB WHERE NECESSARY) AND RUBBER GASKET JOINTS CONFORMING TO ASTM C443, WITH 4 FOOT SUMPS AND GAS TRAP OUTLET ELBOW. PIPE TO STRUCTURE CONNECTIONS SHALL BE MORTARED PIPE OPENINGS.

D. COORDINATES OF MANHOLES REFER TO CENTERS OF STRUCTURES AND CATCH BASINS REFER TO THE CENTER BACK OF THE FRAME AND GRATE.

E. FLARED END SECTIONS (FES) SHALL BE CORRUGATED POLYETHYLENE PIPE AS INDICATED, MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC. HDPE SHALL BE ADS N–12 PIPE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR HANCOR HI Q PIPE AS MANUFACTURED BY HANCOR, INC. OR APPROVED EQUAL.

PART 4 – UTILITIES

4.1 – WATER DISTRIBUTION AND FIRE PROTECTION

A. WATER MAINS 3" DIA. AND LARGER SHALL HAVE 5'–0" MINIMUM COVER AND SHALL BE CEMENT LINED DUCTILE IRON (CLDI), CLASS 52 MINIMUM, CONFORMING TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A21.50, A21.4, A21.10 AND A21.51. JOINTS AT FITTINGS, VALVES AND HYDRANT LATERALS SHALL BE MECHANICAL JOINT PER ANSI A21.11, WITH GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH–ON TYPE WITH GASKETS PER ANSI A21.11. ALL FITTINGS, VALVES, HYDRANTS AND CAPS SHALL BE CLASS 350 PROVIDED WITH THRUST RESTRAINTS (THRUST BLOCKS AND RETAINING RODS) IN CONFORMANCE WITH THE DETAILS.

B. GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR IS ADVISED THAT NOT ALL FITTINGS AND SUPPLY LINES ARE NOTED, SHOWN, OR INDICATED.

C. ALL HYDRANTS SHALL BE INSTALLED WITH A 6" CLDI LATERAL AND SHALL BE INSTALLED WITH A 6" GATE VALVE, BOX, AND TEE FITTING. ALL HYDRANTS SHALL MEET AND BE INSTALLED IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS.

D. ALL WATER MAIN APPURTENANCES, MATERIALS, AND METHODS OF INSTALLATION SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.

E. PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTIONS WITH UTILITY TESTS, FLUSHING, AND INSPECTIONS AS REQUIRED BY THE LOCAL MUNICIPALITY.

F. EXISTING SERVICES SHALL BE CUT AND A WATERTIGHT PLUG SHALL BE INSTALLED. EXISTING GATE VALVES TO BE ABANDONED SHALL BE PERMANENTLY CLOSED AND CAPPED, AND WATER SERVICES SHOULD BE SHUT OFF AT THE MAIN CORPORATION.

4.2 – UTILITY SEPARATION

A. A MINIMUM 10 FEET CLEAR HORIZONTAL DISTANCE SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.

A. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER MAINS CROSS STORM DRAIN LINES.

B. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST TWO FEET BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL DO THE FOLLOWING:

THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL–JOINT PIPE FOR A DISTANCE OF TEN FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, THE WATER MAIN SHALL BE ENCASED IN CONCRETE.

C. PRIMARY ELECTRICAL ENCASED CONDUIT MUST BE SEPARATED FROM GAS BY 3' MIN. AND FROM OTHER UTILITIES BY 2' MINIMUM.

D. TELEPHONE AND FIRE ALARM WHICH SHARE THE SAME TRENCH MUST HAVE A 1' VERTICAL SEPARATION.

E. GAS MAINS MUST BE SEPARATED FROM OTHER UTILITIES BY 2' MINIMUM.

4.3 – ELECTRIC AND COMMUNICATIONS

A. INSTALLATION OF COMMUNICATIONS (TELEPHONE, CABLE AND FIRE ALARM) SYSTEMS SHALL BE COORDINATED AND SCHEDULED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY SERVICING THE PROJECT SITE.

B. COORDINATES REFER TO THE CENTER OF STRUCTURES UNLESS OTHERWISE NOTED OR DETAILED. CONTRACTOR SHALL COORDINATE LIGHT BASE LOCATIONS WITH PROPOSED CURBING AND PARKING LOT STRIPING.

C. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ELECTRICAL SERVICE PRIOR TO ORDERING ANY EQUIPMENT.

PART 5 – PAVEMENT AND CURBING

A. JOINTS BETWEEN NEW BITUMINOUS CONCRETE PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACKSANDED.

B. CURBING SHALL BE INSTALLED AS FOLLOWS:

- BITUMINOUS AND/OR MODIFIED CAPE COD BERM ALONG ALL ROADWAYS. REFER TO SUITE PLAN FOR LOCATIONS.
- DIMENSIONS REFER TO FACE OF CURB UNLESS NOTED OTHERWISE.
- ALL LIMITS OF PAVING SHALL BE CURBED UNLESS NOTED OR DETAILED OTHERWISE.

PART 6 – TRAFFIC CONTROL

A. INCLUDING, BUT NOT LIMITED TO, ALL CROSSWALKS, STOP LINES AND LEGENDS.

- LEGENDS SHALL BE PREFORMED PERMANENT PLASTIC. PAVEMENT MARKINGS SHALL BE THERMO PLASTIC (ALKYD). THE MARKINGS, LEGENDS SHALL BE INSTALLED IN ACCORDANCE WITH THE THE RELEVANT PORTIONS OF MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) STANDARD SPECIFICATIONS. THE CONTRACTOR'S ATTENTION ALSO IS DIRECTED TO THE STANDARD SPECIFICATIONS, FOR REQUIREMENTS REGARDING THE AMBIENT AIR TEMPERATURE AT THE TIME OF APPLICATION.

PART 7 – QUALITY ASSURANCE

A. COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS FROM ACCEPTABLE MANUFACTURERS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. CONFORM TO CONDITIONS OF APPROVAL ISSUED BY REGULATORY AGENCIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, LOCAL PLANNING BOARD, CONSERVATION COMMISSION, CITY COUNCIL, BOARD OF HEALTH, PUBLIC WORKS / HIGHWAY DEPARTMENT, STATE ENVIRONMENTAL PROTECTION DEPARTMENT, AND U.S. GOVERNMENT, ENVIRONMENTAL PROTECTION AGENCY. WHERE CONDITIONS OF REGULATORY APPROVAL DIFFER FROM REQUIREMENTS CONTAINED HEREIN OR ON THE DRAWINGS, COMPLY WITH THE MORE STRINGENT REQUIREMENT.

PART 8 – INSPECTION AND MAINTENANCE

BITUMINOUS CONCRETE

A. INSPECT ALL CATCH BASINS (CB) AND MANHOLES AT LOCATIONS SHOWN ON SUBDIVISION PLANS. LOOK FOR SETTLING OF PAVEMENT, REPAIR AS REQUIRED. LOOK AT LEVEL OF SAND, SILT IN SUMPS. HAVE SUMPS CLEANED IF OUTLET PIPE IS BLOCKED. VERIFY THAT ELBOW (OIL TRAP) ON PIPE OUTLET IS SECURELY IN PLACE. CLEAN ALL LEAVES, TRASH, AND PINE NEEDLES FROM CB GRATE.

B. LOOK FOR SIGNS OF CRACKING & POTHOLES, REPAIR AS REQUIRED.

C. LOOK FOR SIGNS OF EROSION AT EDGES OF ROADWAY. INSPECT FOR BROKEN CURB. SEVERE EROSION MAY BE CAUSED BY PIPE BLOCKAGE AND RESULTING OVERFLOWS OUT OF CATCH BASINS. REMOVE DRAIN MANHOLE COVERS AND CB GRATES IN AREA AND LOOK FOR BLOCKAGES WHERE SURFACE EROSION IS EVIDENT.

LAWNS

A. INSPECT AFTER EACH SIGNIFICANT RAINFALL (½" OR MORE) FOR FIRST 6 MONTHS AFTER CONSTRUCTION TO ENSURE SURFACE VEGETATION IS HEALTHY, DISCHARGE DEVICES ARE NOT BLOCKED AND BANKS ARE NOT ERODING. CHECK ALL COMPONENTS AFTER EACH MAJOR STORM (MORE THAN 2" RAINFALL IN 24 HOURS). CLEAN/REPAIR AS REQUIRED.

LANDSCAPING

A. INSPECT FOR DISEASED/DYING TREES, SHRUBS, GROUND COVER, & GRASS; REPLACE AS REQUIRED.

B. INSPECT MULCH BEDS. SUPPLEMENT AS REQUIRED TO PROVIDE THE SPECIFIED MINIMUM DEPTH (LOOSE MEASURE).

RIP RAP (STONE) SLOPE PROTECTION

A. INSPECT STONE SLOPE PROTECTION, CUT EMERGING YOUNG TREES GROWING IN STONES. INSPECT STONE AT PIPE OUTLETS. REMOVE DEBRIS. REPAIR AS REQUIRED.

PART 9 – LANDSCAPING

A. 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.

B. IT IS CONTRACTORS RESPONSIBILITY TO BECOME APPRISED OF EXISTING CONDITIONS, UNDERGROUND UTILITIES, AND OVERHEAD UTILITIES. COORDINATION WITH ALL RELEVANT COMPANIES OR AGENCIES, INCLUDING PERMITTING, 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.

C. CONTRACTOR SHALL BE RESPONSIBLE FOR ON–SITE SAFETY OF CONSTRUCTION CREW, AND PARTICULARLY OF SAFETY OF PEDESTRIANS DURING PERIOD OF CONSTRUCTION PROJECT.

D. ALL UNUSED MOVEABLE MATERIALS SHALL BE REMOVED FROM THE SITE DAILY, OR STORED IN SUCH A WAY AS TO PRECLUDE LOSS OR VANDALISM. ALL DEBRIS SHALL BE REMOVED, AND ALL WALKS MADE FREE OF OBSTRUCTIONS, AND SITE LEFT IN NEAT, CLEAN CONDITION AT THE CLOSE OF EACH WORK DAY.

E. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES PRIOR TO STARTING WORK. CONTRACTOR TO VERIFY THAT ADEQUATE DRAINAGE EXISTS PRIOR TO PLANTING.

F. 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.

G. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

H. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AT THE NURSERY AND AT THE SITE. ALL TREES SHALL HAVE A SINGLE LEADER UNLESS SPECIFIED OTHERWISE. NO UN–APPROVED SUBSTITUTIONS WILL BE ACCEPTED. PLANT SPECIES AND CULTIVAR, SIZE AND QUANTITY SHALL NOT CHANGE WITHOUT APPROVAL OF LANDSCAPE ARCHITECT.

I. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS ORIGINAL GRADE BEFORE DIGGING. PLANTS TO BE TRANSPLANTED SHALL BE DUG CAREFULLY, WITH ADEQUATE ROOTBALLS AND PRUNED ACCORDING TO ANA STANDARD PRACTICE. TREES WITH ROOT FLARE COVERED BY MORE THAN 1.5" OF SOIL WILL BE REJECTED PRIOR TO INSTALLATION. SET PLANTS PLUMB.

J. ALL TREES AND SHRUBS SHALL BE BALLED IN BURLAP OR CONTAINERIZED, UNLESS SPECIFIED OTHERWISE. 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 PLANTINGS, EXCEPT WIRE THAT IS DIRECTLY UNDER THE ROOTBALLS.

K. CONTRACTOR SHALL PLACE 2" TO 3" OF FINE SHREDDED, AGED 2 YEARS, DARK BROWN PINE BARK MULCH THROUGHOUT THE BED AREAS. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.

L. FLOOD PLANTS THOROUGHLY ONCE IMMEDIATELY AFTER PLANTING AND TWICE DURING THE FIRST TWENTY–FOUR HOUR PERIOD AFTER PLANTING.

M. DO NOT WRAP TRUNK OF TREE.

N. THE CONTRACTOR SHALL MAINTAIN THE PLANTS FOR A MINIMUM OF 60 DAYS FOLLOWING INSTALLATION, OR LONGER IF CONTRACTED BY THE OWNER. BEFORE THE END OF THE 60–DAY 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.

O. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A MINIMUM OF ONE YEAR FROM FINAL ACCEPTANCE BY OWNER/REP. THE CONTRACTOR SHALL REPLACE ANY DEAD MATERIALS AT HIS/HER OWN EXPENSE.

P. GRASS STRIP PREPARATION: REMOVE ALL DEBRIS AND OTHER INORGANIC MATERIALS ON THE PREPARED SUBGRADE, RESHAPE AND DRESS ANY DAMAGED OR ERODED AREA PRIOR TO SPREADING THE LOAM. SCARIFY AND LOOSEN SUBGRADE IN ANY AREAS WHERE COMPACTION MAY HAVE OCCURRED. SPREAD STOCKPILED AND OFF–SITE LOAM ON ALL DISTURBED AREAS TO PRODUCE A DEPTH OF 4", FINE GRADE LOAMED AREAS TO PRODUCE A SMOOTH AND UNBROKEN FINISH GRADE TO THE REQUIRED DEPTH. APPLY A STARTER FERTILIZER (10–20–10) AT A RATE OF 20 LBS. PER 1000 SQUARE FEET AND LIME AT A RATE OF 40 LBS. PER 1000 SQUARE FEET. ONCE SPREAD, THE FERTILIZER AND LIME SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM. THE LOAM SHALL BE ROLLED, AND DEPRESSION SHALL BE TOP DRESSED AND RAKED TO CREATE A SMOOTH SURFACE.

Q. SEEDING: SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 AND MAY 31 OR AUGUST 15 AND OCTOBER 15 ONLY. SEED SHALL BE PURE, LIVE, FRESH SEED FROM COMMERCIAL SOURCES MEETING AND LABELED IN ACCORDANCE WITH STATE AND FEDERAL RULES AND REGULATIONS.

R. SEEDED AREAS SHALL, AT A MINIMUM, INCLUDE ALL AREAS OF THE SITE THAT HAVE BEEN DISTURBED OR ARE BARREN UNLESS OTHERWISE NOTED ON THE PLANS. SEED SHALL BE APPLIED AT A RATE OF 7 LBS. PER 1000 SQUARE FEET.

TYPICAL ABBREVIATIONS

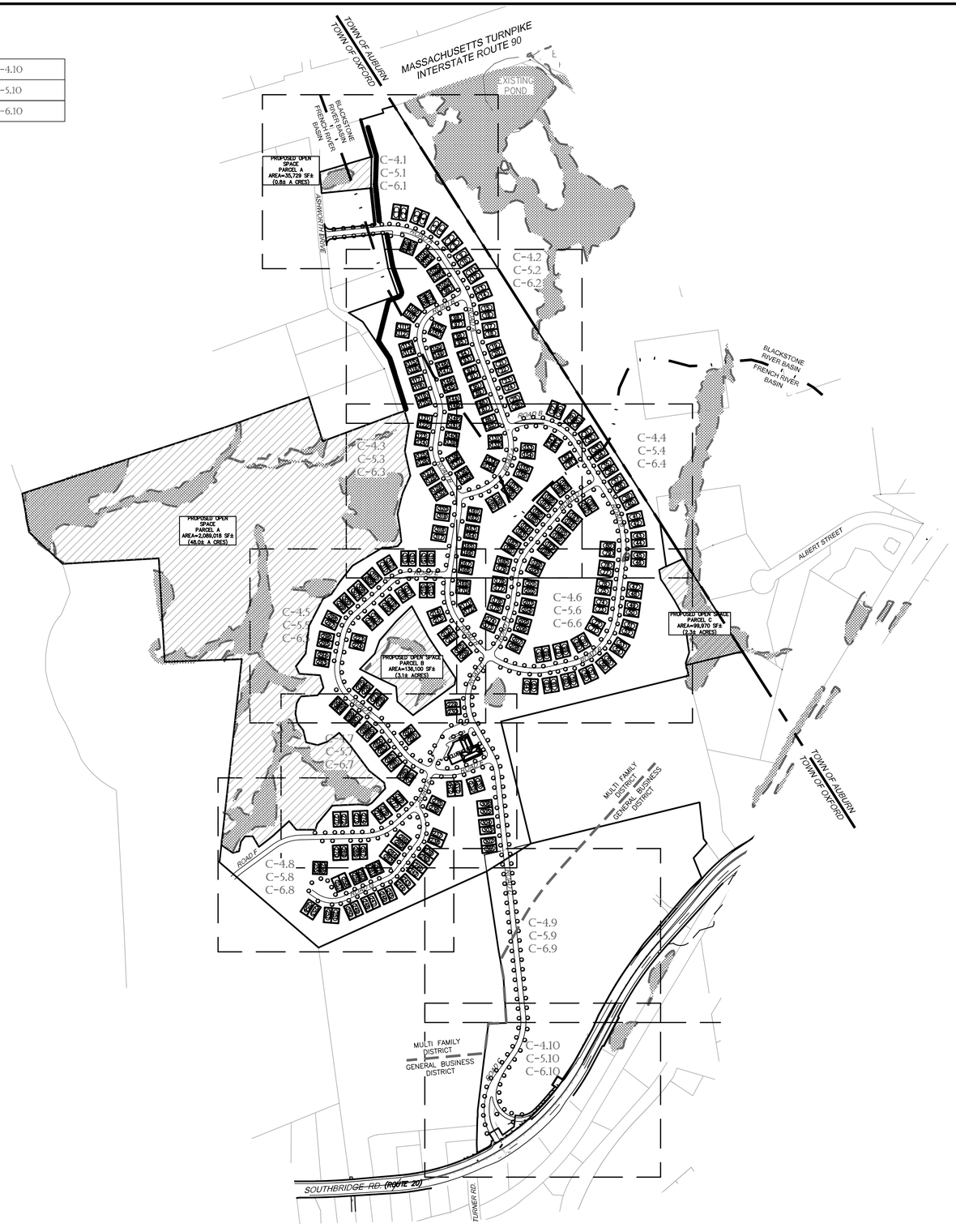
KEY	DESCRIPTION	KEY	DESCRIPTION
N/F	NOW OR FORMERLY	W.C.H.B.	WORCESTER COUNTY HIGHWAY BOUND
BK.	BOOK	BIT.	BITUMINOUS
PG.	PAGE	CONC.	CONCRETE
P.B.	PLAN BOOK	CCB	CAPE COD BERM
PL.	PLAN	BCC	BITUMINOUS CONCRETE CURB
BC	BOTTOM OF CURB	VGC	VERTICAL GRANITE CURB
TC	TOP OF CURB	SGC	SLOPED GRANITE CURB
BW	BOTTOM OF WALL	PCC	PRECAST CONCRETE CURB
TW	TOP OF WALL	HDPE	HIGH DENSITY POLYETHYLENE PIPE
EXIST.	EXISTING	CLDI	CEMENT LINED DUCTILE IRON
PROP.	PROPOSED	RCP	REINFORCED CONCRETE PIPE
TBM	TEMPORARY BENCHMARK	PVC	POLYVINYL CHLORIDE PIPE
TEMP.	TEMPORARY	INV.	INVERT
N.T.S.	NOT TO SCALE	FES	FLARED END SECTION
TYP.	TYPICAL	OCS	OUTLET CONTROL STRUCTURE
ELEV.	ELEVATION	DMH	DRAIN MANHOLE
BLDG.	BUILDING	CB	CATCH BASIN
BSMT.	BASEMENT	DCB	DOUBLE CATCH BASIN
F.F.E.	FINISHED FLOOR ELEVATION	SMH	SEWER MANHOLE
TOC	TOP OF CONCRETE	CO	CLEANOUT
GAR.	GARAGE	HYD	HYDRANT
TBR	TO BE REMOVED	CO	CLEANOUT
FND	FOUND	O.C.	ON CENTER
D.H.	DRILL HOLE	R=	RADIUS
I.P	IRON PIPE	S=	SLOPE
I.R.	IRON ROD	HC	HANDICAP
S.B.	STONE BOUND	UP	UTILITY POLE
W.C.H.B.	WORCESTER COUNTY HIGHWAY BOUND	WF	WETLAND FLAG

TYPICAL LEGEND

| EXISTING

LEGEND

LAYOUT & MATERIALS PLAN	C-4.1 - C-4.10
GRADING & DRAINAGE PLAN	C-5.1 - C-5.10
EROSION CONTROL PLAN	C-6.1 - C-6.10



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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

300 0 150 300 600
(IN FEET)
1 inch = 300 feet

SHEET TITLE

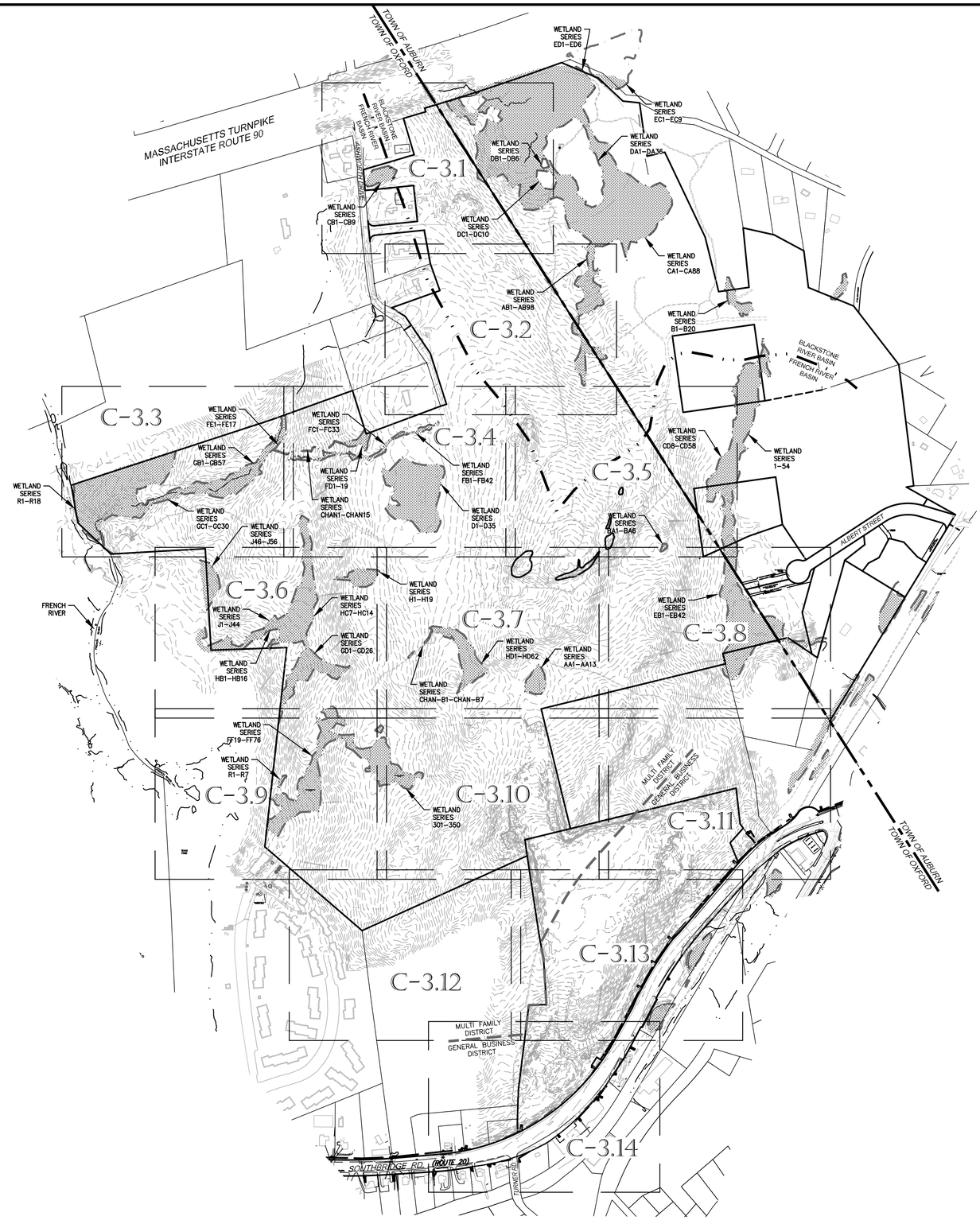
PROPOSED
CONDITIONS
SHEET INDEX

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-2.0

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:08 PM - LAYOUT C2.0



MASS STATE PLANE

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ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

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PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE

300 0 150 300 600
(IN FEET)
1 inch = 300 feet

SHEET TITLE

EXISTING CONDITIONS SHEET INDEX

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.0

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:32 AM - LAYOUT C3.0

MASSACHUSETTS TURNPIKE
INTERSTATE ROUTE 90
(P.B. 203, PL. 23)
(P.B. 203, PL. 94)

TOWN OF AUBURN
TOWN OF OXFORD

BLACKSTONE RIVER BASIN
FRENCH RIVER BASIN

G.B.D.H.
FND

N16°21'56"W
200.00'

R=10350.00'
L=63.64'
D=0°21'08"
T=31.82

G.B.D.H.
FND

N73°38'04"E 122.59'

CB
R=691.49
I=686.18
I OUT=686.16

CB
R=691.37
I=688.11

C.B./D.H.
FND

N16°23'44"W 200.00'

N/F
TRACEY COULTER
SETH COULTER
13 ASHWORTH DR
MAP 3, PARCEL A8.01
BOOK 41264, PAGE 35

POOL

TP1-A
EG=690.0±
ESHGW @ 116"(680.3±)

TP1-B
EG=687.5±
ESHGW @ 76"(681.2±)

TP1-C
EG=690.5±
ESHGW @ 83"(683.5±)

N/F
JAMES ESCOLAS
20 ASHWORTH DR
MAP 3, PARCEL A9.02
BOOK 21808, PAGE 193

N73°33'04"E 278.96'

I.R./FND

N04°49'21"W 109.89'

I.P./FND

S84°11'24"W 256.73'

N/F
GERALD GRAHAM
21 ASHWORTH DR
MAP 3, PARCEL A08
BOOK 34792, PAGE 220

POOL

N06°05'11"W 160.00'

ASHWORTH DRIVE
(PUBLIC)

R=30.00'
L=47.12'
D=89°59'53"
T=30.00'

N84°11'00"E 229.10'

N05°49'00"W 110.00'

R=30.00'
L=47.12'
D=89°59'53"
T=30.00'

S84°11'00"W 260.22'

N/F
CHRISTINE KOSTOROSKI, JACOB YOUNG
KEM CHANTY (UNIT B)
25A & 25B ASHWORTH DR
MAP 3, PARCEL A05.01
BOOK 70707, PAGE 140
BOOK 55108, PAGE 57

N10°20'40"W 179.92'

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

S32°32'57"E 2557.76'

MATCH TO C-3.2

N/F
KAREN ESCOLAS 2021
REVOCABLE TRUST
22 ASHWORTH DR
MAP 3, PARCEL A9
BOOK 65129, PAGE 175

100' WETLAND BUFFER
50' WETLAND BUFFER
20' NO BUILD
10' NO DISTURB

EX. CB
RIM=701.02
INV OUT(12")=697.32

EX. DMH
RIM=700.79
INV IN(12")=696.1
INV IN(12")=695.89
INV OUT(12")=695.49

EX. CB
RIM=701.26
INV OUT(12")=697.32

EX. DMH
RIM=704.17
INV IN(6")=695.15
INV IN(18")=693.83
INV OUT(24")=693.97

EX. DMH(NO COVER)
INV IN(24")=693.31
INV IN(36")=693.19
INV OUT(36")=693.19

EX. DMH(NO COVER)
INV IN(36")=689.68

INV. 692.09
15" CMP

WF-CB1 WF-CB2 WF-CB3 WF-CB4 WF-CB5 WF-CB6 WF-CB7 WF-CB8 WF-CB9

WF-AB1 WF-AB2 WF-AB3 WF-AB4 WF-AB5 WF-AB6 WF-AB7 WF-AB8 WF-AB9 WF-AB10 WF-AB11 WF-AB12 WF-AB13 WF-AB14 WF-AB15 WF-AB16 WF-AB17 WF-AB18 WF-AB19 WF-AB20 WF-AB21 WF-AB22 WF-AB23 WF-AB24 WF-AB25 WF-AB26 WF-AB27 WF-AB28 WF-AB29 WF-AB30 WF-AB31 WF-AB32 WF-AB33 WF-AB34 WF-AB35 WF-AB36 WF-AB37 WF-AB38 WF-AB39 WF-AB40 WF-AB41 WF-AB42 WF-AB43 WF-AB44 WF-AB45 WF-AB46

WF-DA8 WF-DA9 WF-DA10 WF-DA11 WF-DA12 WF-DB3 WF-DB4 WF-DB5 WF-DB6 WF-DB7 WF-DC4 WF-DC5 WF-DC6 WF-DC7 WF-DC8

MASS STATE PLANE

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:33 AM - LAYOUT C3.1

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OXFORD PLANNING BOARD

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APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 1 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.
C-3.1

MATCH TO C-3.1

N70°24'40"W
179.92'

I.P./FND

N19°35'20"W
150.00'

I.P./FND

N/F
DAVID KEELER
BARBARA KEELER
29 ASHWORTH DR
MAP 3, PARCEL A08.02
BOOK 25239, PAGE 240

N70°24'51"E 269.92'

I.P.
FND

N57°22'18"W 66.30'

ASHWORTH DRIVE

END OF ACCEPTED
PUBLIC WAY
JULY 25, 1949

N34°02'17"W 234.95'

REBAR/FND

REBAR/FND

N17°38'50"W
280.93'

N72°21'05"E
33.02'

REBAR/FND

N/F
M R ESCOLAS REVOCABLE
LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A10.01
BOOK 54801, PAGE 312

N/F
M R ESCOLAS REVOCABLE
LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A06
BOOK 54801, PAGE 312

TP2-A
EG=710.0±
ESHGW @ 74"(703.8±)

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

BLACKSTONE RIVER BASIN
FRENCH-FENNER BASIN

TOWN OF AUBURN
TOWN OF OXFORD

S37°32'57"E 255.76'

100' WETLAND BUFFER

50' WETLAND BUFFER

20' NO BUILD TO NO DISTURB

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

MASS STATE PLANE

MATCH TO C-3.3

MATCH TO C-3.4

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:33 AM - LAYOUT C3.2

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OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET 2 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.2

MASS STATE PLANE

N/F
KAREN ESCOLAS 2021
REVOCABLE TRUST
OFF ASHWORTH DR
MAP 3, PARCEL A10
BOOK 65129, PAGE 175

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

N/F
THAYER POND VILLAGE
THAYER POND DR & WOODCREST DR
MAP 6A, PARCEL B10

200' OUTER RIPARIAN ZONE
100' INNER RIPARIAN ZONE
50' WETLAND BUFFER
100' WETLAND BUFFER
10' NO DISTURB
20' NO BUILD

N71°53'53"E 1116.61'
N46°40'41"W 201.72'
N46°40'41"W 239.67'
S86°45'53"W 498.30'

FRENCH RIVER

MATCH TO C-3.4
MATCH TO C-3.6

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:34 AM - LAYOUT: C3.3

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PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

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REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
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DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 3 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 39870
REGISTERED PROFESSIONAL LAND SURVEYOR

1-15-24

SHEET NO.
C-3.3

N/F
KAREN ESCOLAS 2021
REVOCABLE TRUST
OFF ASHWORTH DR
MAP 3, PARCEL A10
BOOK 65129, PAGE 175

I.P./FND

N70°09'04"E 447.66'

S17°35'04"E 239.78'

N/F
M R ESCOLAS REVOCABLE
LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A06
BOOK 54801, PAGE 312

N72°21'05"E 33.02'

REBAR/FND

MATCH TO C-3.2

N69°31'08"E 418.60'

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

I.P./FND

MASS STATE PLANE

100' INNER RIPARIAN ZONE

200' OUTER RIPARIAN ZONE

WF-FE1
WF-FE2
WF-FE4
WF-FE5
WF-FE6

WF-FD19
WF-FD1
WF-FD18
WF-FD2
WF-FD17
WF-FD16
WF-FD15
WF-FD13
WF-FD14
WF-FD12
WF-FD9
WF-FD3
WF-FD8
WF-FD11
WF-FD10
WF-FD4
WF-FD7
WF-FD6
WF-FD5

WF-CHAN1
WF-CHAN2
WF-CHAN3
WF-CHAN4
WF-CHAN5
WF-CHAN6
WF-CHAN7
WF-CHAN8
WF-CHAN9
WF-CHAN10
WF-CHAN11
WF-CHAN12
WF-CHAN13
WF-CHAN14

WF-FC1
WF-FC2
WF-FC3
WF-FC4
WF-FC5
WF-FC6
WF-FC7
WF-FC8
WF-FC9
WF-FC10
WF-FC11
WF-FC12
WF-FC13
WF-FC14
WF-FC15
WF-FC16
WF-FC17
WF-FC18
WF-FC19
WF-FC21
WF-FC22
WF-FC23
WF-FC26
WF-FC27
WF-FC28
WF-FC30
WF-FC31
WF-FC32
WF-FC33

WF-FB1
WF-FB2
WF-FB3
WF-FB4
WF-FB5
WF-FB6
WF-FB9
WF-FB10
WF-FB12
WF-FB14
WF-FB15
WF-FB16
WF-FB17
WF-FB20
WF-FB22
WF-FB23
WF-FB24
WF-FB25
WF-FB26
WF-FB27
WF-FB28
WF-FB29
WF-FB30
WF-FB31
WF-FB32
WF-FB33
WF-FB34
WF-FB35
WF-FB36
WF-FB37
WF-FB38
WF-FB39
WF-FB40
WF-FB42

10' NO DISTURB
20' NO BUILD
50' WETLAND BUFFER

100' WETLAND BUFFER

MATCH TO C-3.3

WF-D4R
WF-D5R
WF-D6R
WF-D7R
WF-D9R
WF-D10R
WF-D11R
WF-D12R(EBT)
WF-D13R
WF-D14R
WF-D15R
WF-D16R
WF-D17R
WF-D18R
WF-D1
WF-D35
WF-D2
WF-D34
WF-D33.5R
WF-D32
WF-D31
WF-D30
WF-D29
WF-D28
WF-D25
WF-D26
WF-D27
WF-D24
WF-D23
WF-D22
WF-D21

BORDERING VEGETATED WETLAND

TP4-B
EG=723.5±
ESHGW @ 40"(720.1±)

TP4-A
EG=723.5±
ESHGW @ 36"(720.5±)

MATCH TO C-3.5

WF-J13
WF-J12
WF-J14
WF-J11
WF-J15
WF-J16
WF-J8
WF-J7
WF-J17

MATCH TO C-3.6

MATCH TO C-3.7

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:34 AM - LAYOUT C3.4

TURNING POINT ENGINEERING
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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET 4 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.4

MATCH TO C-3.3

MATCH TO C-3.4

MATCH TO C-3.7

MATCH TO C-3.8

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

TP3-A
EG=746.0±
ESHGW @ 120"(736.0±)

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

N/F
TONY BAHNAN
OFF TINKER HILL RD
MAP 65, BLOCK 53
BOOK 38599, PAGE 191

BLACKSTONE RIVER BASIN
FRENCH RIVER BASIN

MASS STATE PLANE

TOWN OF AUBURN
TOWN OF OXFORD

S32°32'57"E 255.76'

S07°59'27"E 229.90'

N65°32'17"E 96.50'

50' WETLAND BUFFER

25' WETLAND BUFFER

100' WETLAND BUFFER

ISOLATED WETLANDS NON-BLSE

WF-A989
WF-CD31
WF-CD32
WF-CD33
WF-CD34
WF-CD37
WF-CD38
WF-CD39
WF-CD40
WF-CD41
WF-CD42
WF-CD43
WF-CD44
WF-CD45
WF-CD46
WF-CD47
WF-CD48
WF-CD49
WF-CD50
WF-CD51
WF-CD52
WF-CD53
WF-CD54
WF-CD55
WF-CD56
WF-CD57
WF-CD58
WF-BA1
WF-BA2
WF-BA3
WF-BA4
WF-BA5
WF-BA6
WF15
WF16
WF18
WF19
WF20

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:35 AM - LAYOUT C3.5

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OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 5 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 38870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.
C-3.5

MASS STATE PLANE

N/F
THAYER POND VILLAGE
THAYER POND DR & WOODCREST DR
MAP 6A, PARCEL B10

MATCH TO C-3.3

MATCH TO C-3.4

MATCH TO C-3.7

MATCH TO C-3.9

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

N/F
THAYER POND VILLAGE
THAYER POND DR & WOODCREST DR
MAP 6A, PARCEL B10

N03°44'04"W 535.92'

S88°00'56"W 399.31'

N06°15'53"E 1057.14'

100' WETLAND BUFFER

50' WETLAND BUFFER

20' NO BUILD

10' NO DISTURB

TP5-A
EG=683.5±
ESHGW @ 36"(680.5±)

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:35 AM - LAYOUT C3.6

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OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET 6 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR
11-15-24

SHEET NO.

C-3.6

MATCH TO C-3.4

MATCH TO C-3.5

MASS STATE PLANE

MATCH TO C-3.6

MATCH TO C-3.8

MATCH TO C-3.10

100' WETLAND BUFFER

50' WETLAND BUFFER

20' NO BUILD

10' NO DISTURB

WF-H2
WF-H1
WF-H19
WF-H18
WF-H16
WF-H15
WF-H14
WF-H13
WF-H12
WF-H11
WF-H10
WF-H9
WF-H17
WF-H20
WF-H27
WF-H29
WF-H28
WF-CHAN-B1
WF-H31
WF-H32
WF-H35
WF-H33
WF-H34
WF-H36
WF-CHAN-B2
WF-CHAN-B3
WF-CHAN-B5
WF-CHAN-B5
WF-CHAN-B7
WF-H8
WF-H7
WF-H6
WF-H5
WF-H4
WF-H3
WF-H1
WF-H37
WF-H40
WF-H41
WF-H43
WF-H44
WF-H47
WF-H49
WF-H50
WF-H59
WF-H58
WF-H57
WF-H56
WF-H55
WF-H53
WF-H62
WF-H60

BORDERING VEGETATED WETLANDS

WF-AA7
WF-AA6
WF-AA8
WF-AA5
WF-AA9
WF-AA10
WF-AA4
WF-AA11
WF-AA3
WF-AA12
WF-AA13
WF-AA1
WF-AA2

ISOLATED VEGETATED WETLAND

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

S76°15'54"W 1000.00'

REBAR/FND

N/F
CHARTER COMMUNICATIONS ENTERTAINMENT I, LLC
195 SOUTHBRIDGE RD
MAP 06, BLOCK A, PARCEL 01.01
BOOK 21800 PAGE 221

H:_PROJECTS\OXFORD\10010-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:36 AM - LAYOUT C3.7

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OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD

OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-10010
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\10010...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET 7 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.7

MATCH TO C-3.5

MATCH TO C-3.7

MATCH TO C-3.11

N65°34'17"E 96.50'

C.B./D.H. FND

(TO EASEMENT) 209.93'

27-29 ALBERT STREET CONDOMINIUM
N/F
HANUMANTHARAYAPPA & WEI
27 & 29 ALBERT ST
MAP 65, PARCELS 52-1 & 52-2
BOOK 56945, PAGE 254 &
BOOK 65526, PAGE 256

TBM: BONNET BOLT ON HYDRANT EL. 683.61

ALBERT STREET

10' TEMPORARY GRADING EASEMENT
ACCESS & UTILITY EASEMENT

10.59'

30.00'

ACCESS & UTILITY EASEMENT
AREA=16,791± S.F.

ACCESS & UTILITY EASEMENT
10' TEMPORARY GRADING EASEMENT

S32°32'51"E 568.47' (TOTAL)

10.59'

MASS STATE PLANE

28-30 ALBERT STREET CONDOMINIUM
N/F
PLIEGO & CIOCIOLO
28 & 30 ALBERT ST
MAP 65, PARCELS 70-1 & 70-2
BOOK 56903, PAGE 317 &
BOOK 66202, PAGE 156

10' BUFFER

50' WETLAND BUFFER

25' WETLAND BUFFER

273.81' (TO EASEMENT)

TP8-A
EG=685.5±
ESHGW @ 74"(679.3±)

TP8-B
EG=686.0±
ESHGW @ 62"(680.8±)

TP8-C
EG=687.0±
ESHGW @ 78"(680.5±)

20' NO BUILD
10' NO DISTURB

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

C.B./D.H. END/LEANING

299.02'

S76°15'18"W

C.B.D.H. FND

S13°44'21"E 55.90'

I.P. FND

S76°15'54"W 1000.00'

C.B./D.H. FND

N/F
CHARTER COMMUNICATIONS
ENTERTAINMENT I, LLC
195 SOUTHBRIDGE RD
MAP 06, BLOCK A, PARCEL 01.01
BOOK 21800 PAGE 221

N/F
LINDA BOOKER
OFF BLAKER ST
MAP 65, BLOCK 55
BOOK 21619, PAGE 272

50' WETLAND BUFFER

100' WETLAND BUFFER

TOWN OF AUBURN
TOWN OF OXFORD

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:36 AM - LAYOUT C3.8

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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 8 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.
C-3.8

MATCH TO C-3.5

MASS STATE PLANE

FRENCH RIVER

TEXAS POND

N/F
THAYER POND VILLAGE
THAYER POND DR & WOODCREST DR
MAP 6A, PARCEL B10

100' INNER RIPARIAN ZONE

200' OUTER RIPARIAN ZONE

N06°15'53"E 1057.14'

N49°14'14"W 676.45'

"BORDERING VEGETATED WETLAND"

20' NO BUILD

10' NO DISTURB

50' WETLAND BUFFER

100' WETLAND BUFFER

TP7-A
EG=628.0±
ESHGW @ 36"(625.0±)

TP6-B
EG=671.5±
ESHGW @ 84"(664.5±)

N/F
OXFORD RESERVE, LLC
0 ASHWORTH DRIVE
MAP 3, BLOCK A, PARCEL 5
BOOK 56737, PAGE 255

MATCH TO C-3.10

MATCH TO C-3.11

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:37 AM - LAYOUT C3.9

TURNING POINT ENGINEERING
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APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
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CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EXISTING CONDITIONS PLAN

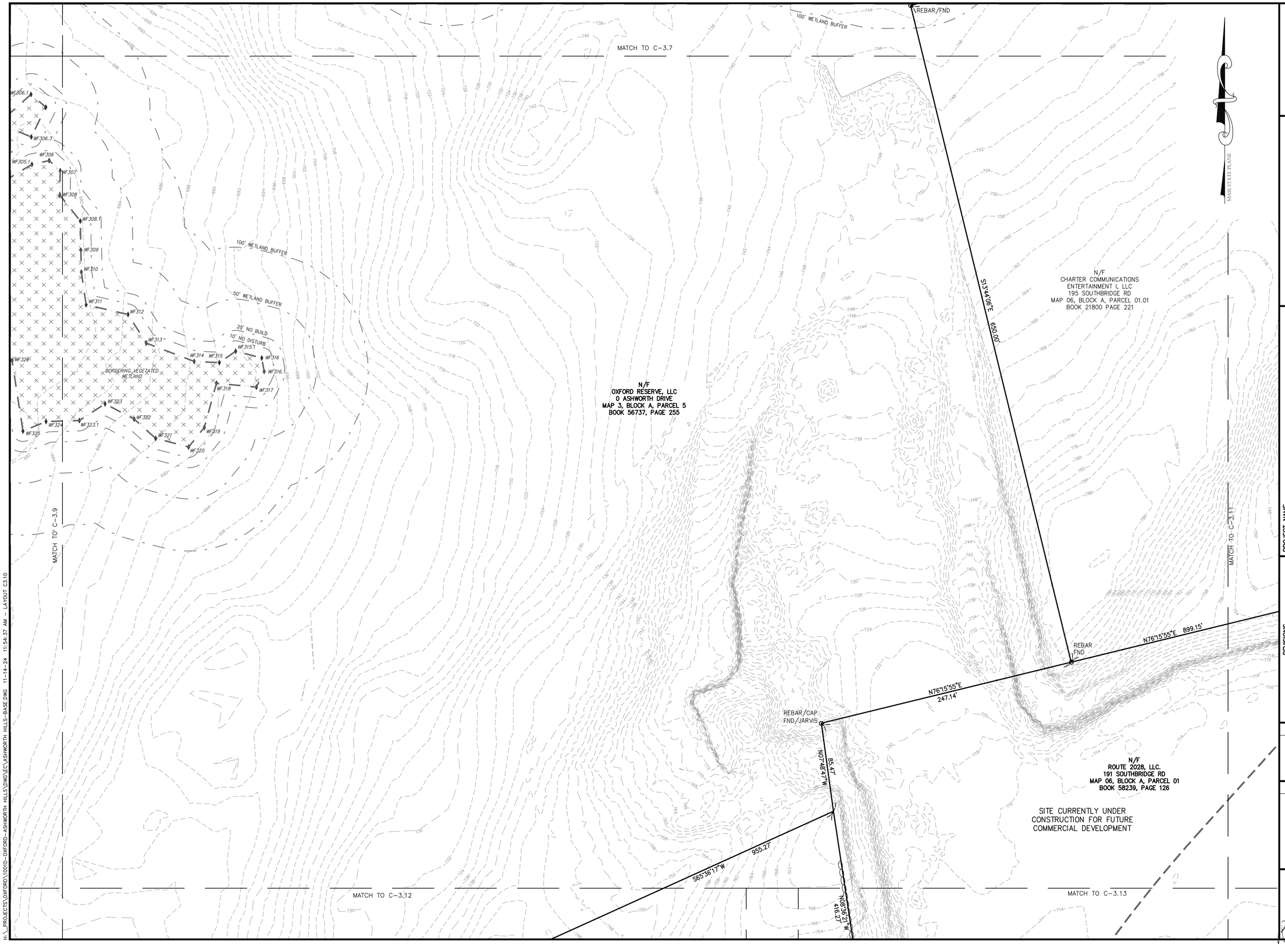
SHEET 9 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 38870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.9



H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:37 AM - LAYOUT C3.10

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OXFORD, MASSACHUSETTS

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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET 10 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.10

MATCH TO C-3.8

N/F
LINDA BOOKER
OFF BLAKER ST
MAP 65, BLOCK 55
BOOK 21619, PAGE 272

N/F
CHARTER COMMUNICATIONS ENTERTAINMENT I, LLC
195 SOUTHBRIDGE RD
MAP 06, BLOCK A, PARCEL 01.01
BOOK 21800 PAGE 221

N/F
RAYMOND SHEA E JR
197 SOUTHBRIDGE
MAP 06, BLOCK A, PARCEL 01.02
BOOK 7463 PAGE 275

MASS STATE PLANE

MATCH TO C-3.10

MULTI FAMILY DISTRICT
GENERAL BUSINESS DISTRICT

N76°15'55"E 899.15'

REBAR/FND
I.P./FND

S06°16'30"E 189.55'

REBAR/FND

S36°19'06"E 38.27'

103.36'

S41°55'35"W

S22°12'15"E 115.21'

EXISTING LINE OF EASEMENT 2022 ALTERATION LAYOUT NO. 8735

EXISTING STATE HIGHWAY LAYOUT 2022 ALTERATION LAYOUT NO. 8735

N/F
ROUTE 2028, LLC
191 SOUTHBRIDGE RD
MAP 06, BLOCK A, PARCEL 01
BOOK 58239, PAGE 126

SITE CURRENTLY UNDER CONSTRUCTION FOR FUTURE COMMERCIAL DEVELOPMENT

N/F
RAYMOND E SHEA JR
193 SOUTHBRIDGE
MAP 06, BLOCK A, PARCEL 01.03
BOOK 13073 PAGE 241

R=836.22'
L=195.07'
D=13°21'57"
T=97.98'

SOUTHBRIDGE ROAD (ROUTE 20)

GUARDRAIL

MATCH TO C-3.13

N/F NEW ENGLAND POWER CO.
423 SOUTHBRIDGE
MAP 06B, BLOCK B, PARCEL 04

N/F
ELEFTHERIA LLC
916 SOUTHBRIDGE ST
MAP 06B, BLOCK A, PARCEL 05
BOOK 70464 PAGE 228

R=487.50'
L=48.14'
D=5°39'27"
T=24.09'

R=283.50'
L=121.61'
D=24°34'38"
T=61.91'

R=67.50'
L=128.09'
D=108°43'48"
T=94.16'

R=1668.39'
L=4.03'
D=0°08'18"
T=2.02'

10' NO DISTURB

12" DRAIN

12" CI DRAIN

12" PVC DRAIN

1' W DRAIN DITCH

VGC

GRAVEL

R=801.50'
L=76.53'
D=5°28'15"
T=38.29'

GRAN CONC

TELEPHONE

BIT CONC

CONC WALK

#200
1 STORY
BRICK

N/F
OBSIDIAN ML 6 LLC
200 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 09
BOOK 69194 PAGE 78

METAL SHED
CONCRETE

AIR COMPRESSOR

N/F
HUGEUNOT DEVELOPMENT CORP
0 MAIN ST
MAP 06B, BLOCK B, PARCEL 10
BOOK 6627 PAGE 1

CONCRETE PAD

#315-1

BIT ISLAND

BIT BERM

MAIN STREET (ROUTE 12)

UP

WF-A7 WF-A8 WF-17 WF-A6 WF-18 WF-A5 WF-19 WF-A4 WF-A3 WF-20 WF-A2 WF-A1 WF-22 WF-21 WF-23 WF-26 WF-24 WF-25

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:38 AM - LAYOUT C3.11

TURNING POINT ENGINEERING
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RESIDENTIAL DEVELOPMENT
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OXFORD, MASSACHUSETTS

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997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 11 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E WILSON, JR
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR
11-15-24

SHEET NO.
C-3.11

MATCH TO C-3.9

MATCH TO C-3.10

TP6-A
EG=671.5±
ESHGW @ >120"(661.5±)

N49°14'14"W 676.45'

S65°36'17"W 955.27'

EX. SMH A
RIM 637.11
INV. 629.71 (6" PVC)
INV. 629.69 (8" PVC)

N/F
THAYER POND VILLAGE
THAYER POND DR &
WOODCREST DR
MAP 6A, PARCEL B10

FIELD S.B.
FND

N/F
MARLBORO EAST
REALTY CORP
163 SOUTHBRIDGE ST
MAP 6A, PARCEL B16
BOOK 14902, PAGE 71

WOODCREST DRIVE

MASS STATE PLANE

MATCH TO C-3.13

MATCH TO C-3.14

MULTI FAMILY DISTRICT
GENERAL BUSINESS DISTRICT

H:_PROJECTS\OXFORD\10010-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:39 AM - LAYOUT C3.12

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CIVIL SITE DESIGN
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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-10010
DESIGNED BY	JAB, TRB
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CAD FILE	H:\10010...\DWG\EC\Ashworth BASE.dwg
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 12 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E WILSON, JR
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.
C-3.12

MATCH TO C-3.10

MATCH TO C-3.11

MATCH TO C-3.12

MATCH TO C-3.14

N08°52'21"W
416.27'

D.H./FND

D.H./FND
(LOOSE)

N10°15'00"W

MULTI FAMILY DISTRICT
GENERAL BUSINESS DISTRICT

SITE CURRENTLY UNDER
CONSTRUCTION FOR FUTURE
COMMERCIAL DEVELOPMENT

N/F
ROUTE 2028, LLC
191 SOUTHBRIDGE RD
MAP 06, BLOCK A, PARCEL 01
BOOK 58239, PAGE 126

140.27'

N/F
MARLBORO EAST
REALTY CORP
163 SOUTHBRIDGE ST
MAP 6A, PARCEL B16
BOOK 14902, PAGE 71

N03°33'53"W
235.40'

I.P./FND

N88°16'48"E
92.80'

N07°01'20"E
453.92'

EXISTING HAUL ROAD

EXISTING HAUL ROAD

EXISTING
LINE OF EASEMENT
2022 ALTERATION
LAYOUT NO. 8735

S40°20'10"W
388.07'

409.85'

3"FMS

FOP

R=1792.00'
L=43.92'

S40°36'44"W
44.75'

S43°42'03"W
55.18'

GUARDRAIL

M.H.B./E.P.L.P.
FND

EXIST. DI-2
BURIED

EXIST. DI-1
RIM 625.16

12" RCP

N/F
NEW ENGLAND
POWER CO.
423 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 08
BOOK 6627 PAGE 1

MASS STATE PLANE

R=1798.50'
L=234.35'

3"FMS

EXISTING STATE
HIGHWAY LAYOUT
2022 ALTERATION
LAYOUT NO. 8735

SOUTHBRIDGE ROAD
(ROUTE 20)

N/F
FRANCIS M.
CHARAMELLA
184 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 06
BOOK 6433 PAGE 29

N/F
JHI REALTY, LLC
731 MAIN ST
MAP 06B, BLOCK B, PARCEL 11
BOOK 66913 PAGE 365

S28°53'19"W
101.64'

S23°06'58"W
65.00'

S28°53'19"W
200.44'

N/F
ECHO REALTY TRUST
180 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 04
BOOK 47710 PAGE 298

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:39 AM - LAYOUT C3.13

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PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

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EXISTING CONDITIONS
PLAN

SHEET 13 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 38870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.

C-3.13

MATCH TO C-3.12

MATCH TO C-3.13

MULTI FAMILY DISTRICT
GENERAL BUSINESS DISTRICT

N07°01'20"E 453.92'

SITE CURRENTLY UNDER CONSTRUCTION FOR FUTURE COMMERCIAL DEVELOPMENT

EXISTING HAUL ROAD

DETENTION BASIN

TP 215-1
EG=638.0±
ESHGW @ 96"(630.0±)

EXISTING LINE OF EASEMENT 2022 ALTERATION LAYOUT NO. 8735

S28°53'19"W 280.44'

L=118.37'

N57°44'31"E 32.68'

S15°17'42"W 50.05'

L=29.16'

S57°44'31"W

EXISTING RIGHT OF WAY

3" FMS

GUARDRAIL

EXISTING STATE HIGHWAY LAYOUT 2022 ALTERATION LAYOUT NO. 8735

N00°21'39"E 35.30'

D.H. /FND

I.P. /FND

N86°46'36"E 1.39'

N07°31'37"E 133.80'

N02°17'22"W 53.59'

R=1158.00'
L=1135.27'

L=547.39

SOUTHBRIDGE ROAD
(ROUTE 20)

TURNER ROAD

12"x12" TEE

12" CLD

N/F
MARLBORO EAST REALTY CORP
163 SOUTHBRIDGE ST
MAP 6A, PARCEL B16
BOOK 14902, PAGE 71

N/F
MARLBORO EAST REALTY CORP
165 SOUTHBRIDGE ST
MAP 6A, PARCEL B16.02
BOOK 14902, PAGE 74

N/F
MARLBORO EAST REALTY CORP
169 SOUTHBRIDGE ST
MAP 6A, PARCEL B16.04
BOOK 14902, PAGE 74

N/F
MARLBORO EAST REALTY CORP
171 SOUTHBRIDGE ST
MAP 6A, PARCEL B16.03
BOOK 14902, PAGE 74

N/F
MARLBORO EAST REALTY CORP
167 SOUTHBRIDGE ST
MAP 6A, PARCEL B16.01
BOOK 14902, PAGE 74

#167

#20/14

UP #20-1/14
1NT

#168

#170

#172

#2/2NT

N/F
REVOC LIVING TRUST OF S E BASIUL-2004
166 SOUTHBRIDGE RD
MAP 08A, BLOCK B, PARCEL 14
BOOK 33127 PAGE 325

N/F
YARITZA MONTANEZ
168 SOUTHBRIDGE RD
MAP 08A, BLOCK B, PARCEL 15
BOOK 68715 PAGE 283

N/F
ANDRE M. SYLVAIN
170 SOUTHBRIDGE RD
MAP 08A, BLOCK B, PARCEL 16
BOOK 70149 PAGE 355

N/F
MOISES & YESICA T. RODRIGUEZ
172 SOUTHBRIDGE RD
MAP 08A, BLOCK B, PARCEL 17
BOOK 46225 PAGE 156

N/F
RICHARD K NOVAK, RONALD R
174 SOUTHBRIDGE
MAP 06B, BLOCK B, PARCEL 01
BOOK 23324 PAGE 257

N/F
RDDR, LLC
178 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 03
BOOK 68325 PAGE 52

N/F
204-206 BARRE PAXTON REALTY LLC
176 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 02
BOOK 68325 PAGE 52

N/F
RAYMOND E SHEA, JR
MAP 06B, BLOCK A, PARCEL 1.01
BOOK 7305 PAGE 296

#180

N/F
ECHO REALTY TRUST
180 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 04
BOOK 47710 PAGE 298

N/F
ANCHOR REALTY GROUP LLC
727-729 MAIN STREET
MAP 06B, BLOCK B, PAGE 12
BOOK 60035 PAGE 371

N/F
WILLIAM J. SULLIVAN, LLC
725 MAIN STREET
MAP 06B, BLOCK B, PARCEL 16
BOOK 66843 PAGE 232

N/F
NEW ENGLAND POWER CO.
423 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 08
BOOK 6627 PAGE 1

N/F
WILLIAM J. SULLIVAN, LLC
723 MAIN STREET
MAP 06B, BLOCK B, PARCEL 16.01
BOOK 66843 PAGE 232

N/F
NICHOLAS DIGIULIO
7 TURNER ROAD
MAP 06B, BLOCK B, PARCEL 17
BOOK 64847 PAGE 362

MASS STATE PLANE

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\EC\ASHWORTH HILLS-BASE.DWG 11-14-24 11:54:40 AM - LAYOUT C3.14

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RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

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997 Millbury Street
Worcester, MA 01607

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GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EXISTING CONDITIONS PLAN
SHEET 14 OF 14

COMMONWEALTH OF MASSACHUSETTS
BRUCE E. WILSON, JR.
NO. 36870
REGISTERED PROFESSIONAL LAND SURVEYOR

11-15-24

SHEET NO.
C-3.14

MASSACHUSETTS TURNPIKE
INTERSTATE ROUTE 90
(P.B. 203, PL. 23)
(P.B. 203, PL. 94)

G.B.D.H. FND

G.B.D.H. FND

CB
R=691.49
I=686.18
I OUT=686.16

CB
R=691.37
I=688.11

C.B./D.H. FND

N/F
TRACEY COULTER
SETH COULTER
13 ASHWORTH DR
MAP 3, PARCEL A8.01
BOOK 41264, PAGE 35

POOL

N/F
JAMES ESCOLAS
20 ASHWORTH DR
MAP 3, PARCEL A9.02
BOOK 21808, PAGE 193

I.R./FND

UP#6

TP1-A
EG=690.0±
ESHGW @ 116'(680.3±)

TP1-B
EG=687.5±
ESHGW @ 76'(681.2±)

TP1-C
EG=690.5±
ESHGW @ 83'(683.5±)

BASIN #1

OPEN SPACE
PARCEL D

10' NO DISTURB
20' NO BUILD

100' WETLAND BUFFER

50' BUFFER SETBACK

25' YARD SETBACK

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

MASS STATE PLANE

I.P./FND

N/F
GERALD GRAHAM
21 ASHWORTH DR
MAP 3, PARCEL A08
BOOK 34792, PAGE 220

POOL

ASHWORTH DRIVE
(PUBLIC)

INSTALL STREET & STOP SIGN (TYP.)

CONC. HANDICAP RAMP (TYP.)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

ROAD A
(46' WIDE)

STREET TREE (TYP.)

N/F
CHRISTINE KOSTOROSKI, JACOB YOUNG
KEM CHANTY (UNIT B)
25A & 25B ASHWORTH DR
MAP 3, PARCEL A05.01
BOOK 70707, PAGE 140
BOOK 55108, PAGE 57

INSTALL LIGHT BASE (TYP.)

PROPOSED TREELINE (TYP.)

MATCH TO C-4.2

N/F
KAREN ESCOLAS 2021
REVOCABLE TRUST
22 ASHWORTH DR
MAP 3, PARCEL A9
BOOK 65129, PAGE 175

I.P./FND

GENERAL SNOW STORAGE NOTE:
ALL SNOW REMOVED FROM ROADWAYS, SIDEWALK AND/OR DRIVEWAYS SHALL BE STORED IN LANDSCAPE AREAS OUTSIDE OF PEDESTRIAN AND VEHICULAR PATHWAYS.

SNOW SHALL NOT BE STORED IN STORM WATER BASINS.

SNOW SHALL NOT BE STORED/PILED SUCH THAT IT IMPEDES THE SIGHT LINES OF VEHICULAR MOVEMENTS ALONG ROADWAYS AND/OR DRIVEWAYS.

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:10 PM - LAYOUT C4.1

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APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

LAYOUT &
MATERIALS PLAN

SHEET 2 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.1

MATCH TO C-4.1

I.P./FND

BASIN #2
TP2-A
EG=710.0±
WSHGW @ 74"(703.8±)

N/F
DAVID KEELER
BARBARA KEELER
29 ASHWORTH DR
MAP 3, PARCEL A08.02
BOOK 25239, PAGE 240

I.P./FND

PROPOSED TREELINE (TYP.)

I.P. FND

ASHWORTH DRIVE

END OF ACCEPTED PUBLIC WAY JULY 25, 1949

N/F
M R ESCOLAS REVOCABLE LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A10.01
BOOK 54801, PAGE 312

REBAR/FND

REBAR/FND

76.0'

79.7'

20.7'

20.5'

STREET TREE (TYP.)

5' WIDE PAINTED CROSSWALK (TYP.)

INSTALL STREET & STOP SIGN (TYP.)

INSTALL LIGHT BASE (TYP.)

HANDICAP RAMP (TYP.)

STREET TREE (TYP.)

5' WIDE BIT.-CONC. SIDEWALK (TYP.)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

STREET TREE (TYP.)

ROAD B
(26' WIDE)

ROAD A
(26' WIDE)

5' WIDE BIT.-CONC. SIDEWALK (TYP.)

STREET TREE (TYP.)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

INSTALL LIGHT BASE (TYP.)

INSTALL STREET & STOP SIGN (TYP.)

STREET TREE (TYP.)

ROAD B
(26' WIDE)

25' YARD SETBACK

PROPOSED TREELINE (TYP.)

REBAR/FND

N/F
M R ESCOLAS REVOCABLE LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A06
BOOK 54801, PAGE 312

MATCH TO C-4.3

MATCH TO C-4.4

25' YARD SETBACK

100' WETLAND BUFFER

NO DISTURB
30' NO BUILD

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

PROPOSED TREELINE (TYP.)

PROPOSED TREELINE (TYP.)

MASS STATE PLANE

GENERAL SNOW STORAGE NOTE:
ALL SNOW REMOVED FROM ROADWAYS, SIDEWALK AND/OR DRIVEWAYS SHALL BE STORED IN LANDSCAPE AREAS OUTSIDE OF PEDESTRIAN AND VEHICULAR PATHWAYS.

SNOW SHALL NOT BE STORED IN STORM WATER BASINS.

SNOW SHALL NOT BE STORED/PILED SUCH THAT IT IMPEDES THE SIGHT LINES OF VEHICULAR MOVEMENTS ALONG ROADWAYS AND/OR DRIVEWAYS.

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GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

LAYOUT &
MATERIALS PLAN

SHEET 2 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.2

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:10 PM - LAYOUT C4.2

N/F
M R ESCOLAS REVOCABLE
LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A06
BOOK 54801, PAGE 312

REBAR FND

PROPOSED TREELINE (TYP.)

25' YARD SETBACK

50' BUFFER SETBACK

MASS STATE PLANE

OPEN SPACE PARCEL A

MATCH TO C-4.2

MATCH TO C-4.4

MATCH TO C-4.5

MATCH TO C-4.6

ROAD B (26' WIDE)

ROAD A (26' WIDE)

ROAD E (26' WIDE)

ROAD D (24' WIDE)

STREET TREE (TYP.)

5' WIDE BIT.-CONC. SIDEWALK (TYP.)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

INSTALL LIGHT BASE (TYP.)

INSTALL STREET & STOP SIGN (TYP.)

5' WIDE PAINTED CROSSWALK (TYP.)

CONC. HANDICAP RAMP (TYP.)

BASIN #3

TP3-A
EG=746.0±
ESHGW @ 120"(736.0±)

BASIN#4

100' WETLAND BUFFER

BORDERING VEGETATED WETLAND

10' NO DISTURB

TP4-B
EG=723.5±
ESHGW @ 40"(720.1±)

TP4-A
EG=723.5±
ESHGW @ 36"(720.5±)

PROPOSED TREELINE (TYP.)

GENERAL SNOW STORAGE NOTE:
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SNOW SHALL NOT BE STORED/PILED SUCH THAT IT IMPEDES THE SIGHT LINES OF VEHICULAR MOVEMENTS ALONG ROADWAYS AND/OR DRIVEWAYS.

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:11 PM - LAYOUT C4.3

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

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40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

LAYOUT &
MATERIALS PLAN

SHEET 3 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.3

GENERAL SNOW STORAGE NOTE:
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MATCH TO C-4.2

MATCH TO C-4.3

MATCH TO C-4.6

ROAD A (26' WIDE)

ROAD B (26' WIDE)

ROAD D (24' WIDE)

ROAD B' (26' WIDE)

BASIN #3

TP3-A
EG=746.0±
ESHGW @ 120'(736.0±)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

INSTALL LIGHT BASE (TYP.)

INSTALL STREET & STOP SIGN (TYP.)

STREET TREE (TYP.)

5' WIDE BIT.-CONC. SIDEWALK (TYP.)

5' WIDE PAINTED CROSSWALK (TYP.)

CONC. HANDICAP RAMP (TYP.)

PROPOSED TREELINE (TYP.)

25' YARD SETBACK

ISOLATED WETLAND TO BE FILLED, LOCAL JURISDICTION ONLY. 942 SF

C.B. /D.H. TYP.

50' BUFFER SETBACK

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

N/F
TONY BAHNAN
OFF TINKER HILL RD
MAP 65, BLOCK 53
BOOK 38599, PAGE 191

MASS STATE PLANE

100' WETLAND BUFFER

50' WETLAND BUFFER

25' WETLAND BUFFER

WF-CD34 WF-CD37 WF-CD38 WF-CD39 WF-CD40 WF-CD41 WF-CD42 WF-CD43 WF-CD44 WF-CD45 WF-CD46 WF-CD47 WF-CD48 WF-CD49 WF-CD50 WF-CD51 WF-CD52 WF-CD53 WF-CD54 WF-CD55 WF-CD56 WF-CD57 WF-CD58

WF-BA1 WF-BA2 WF-BA3 WF-BA4 WF-BA5 WF-BA6

WF-EB41 WF-EB42

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P.O. Box 757 • Sutton, MA 01590
P:(508) 381-1515 F:(508) 647-0189
www.tpecivildesign.com

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

LAYOUT & MATERIALS PLAN

SHEET 4 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.4

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:12 PM - LAYOUT C4.4

MATCH TO C-4.3

MATCH TO C-4.8

MATCH TO C-4.7

100' WETLAND BUFFER

OPEN SPACE PARCEL A

OPEN SPACE PARCEL B

20' NO BUILD
10' NO DISTURB

ROAD E (26' WIDE)

ROAD B (26' WIDE)

ROAD C (26' WIDE)

STREET TREE (TYP.)

5' WIDE PAINTED CROSSWALK (TYP.)

CONC. HANDICAP RAMP (TYP.)

INSTALL LIGHT BASE (TYP.)

INSTALL STREET & STOP SIGN (TYP.)

5' WIDE BIT.-CONC. SIDEWALK (TYP.)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

PROPOSED TREELINE (TYP.)

21'± (TYP.)

50' BUFFER SETBACK

BORDERING VEGETATED WETLANDS

BASIN#5

GENERAL SNOW STORAGE NOTE:

ALL SNOW REMOVED FROM ROADWAYS, SIDEWALK AND/OR DRIVEWAYS SHALL BE STORED IN LANDSCAPE AREAS OUTSIDE OF PEDESTRIAN AND VEHICULAR PATHWAYS.

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SHEET TITLE

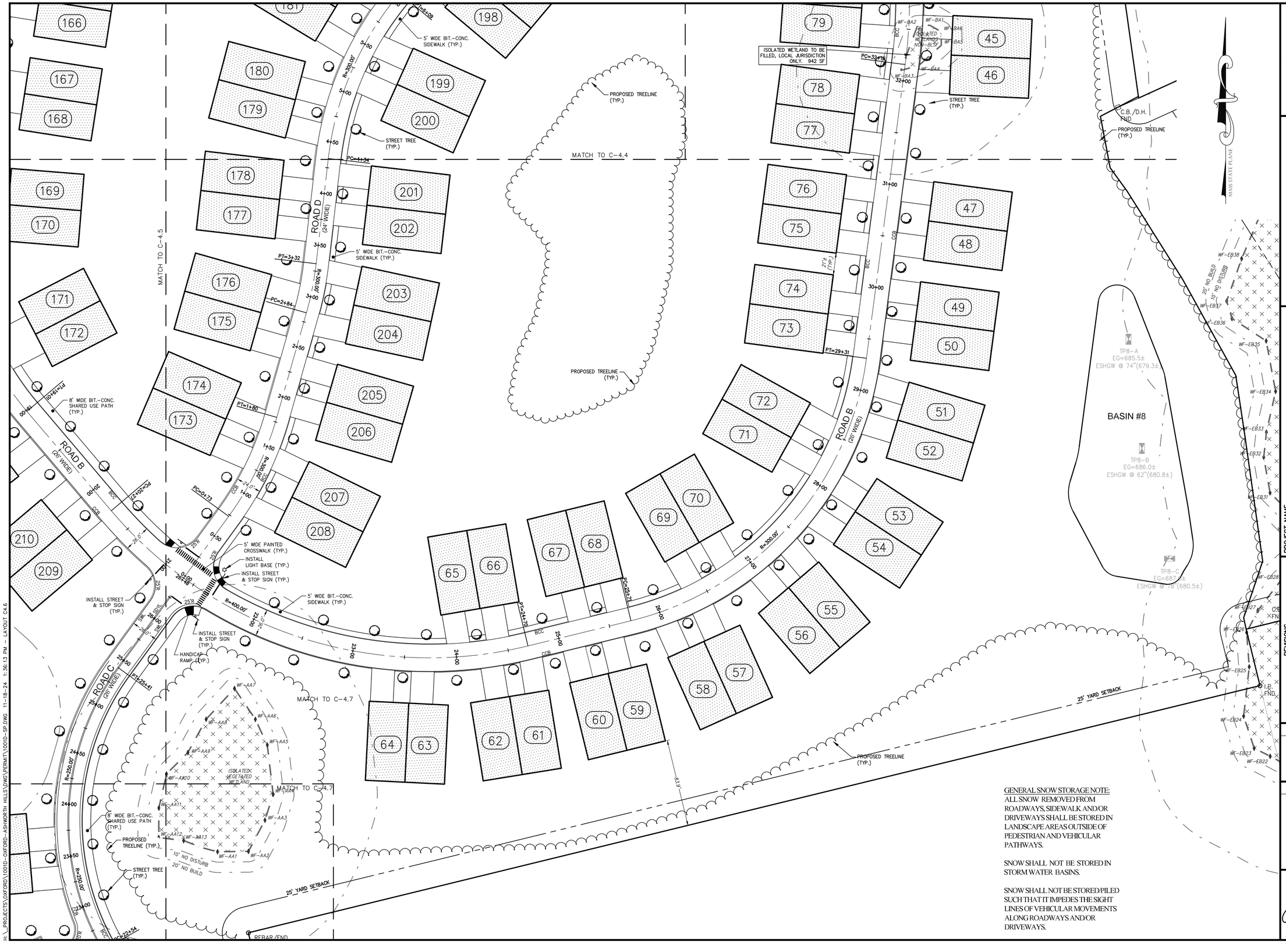
LAYOUT & MATERIALS PLAN

SHEET 5 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.5



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SHEET TITLE
LAYOUT & MATERIALS PLAN
SHEET 6 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C-4.6

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:13 PM - LAYOUT C4.6

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
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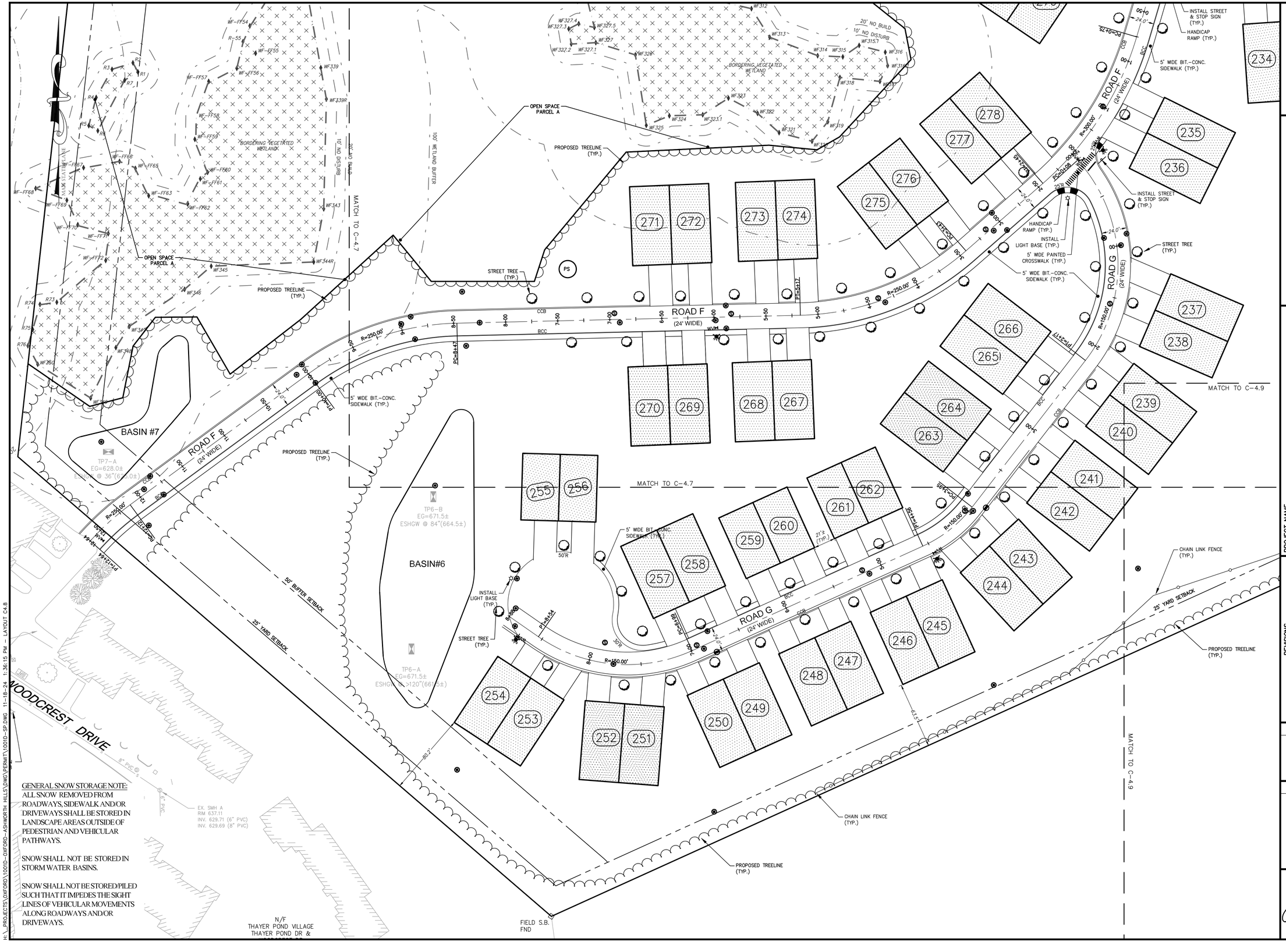
SHEET TITLE
LAYOUT & MATERIALS PLAN
SHEET 7 OF 10

JAMES A. BERNARDINO — COMMONWEALTH OF MASSACHUSETTS — No. 41717 — REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C-4.7



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SHEET TITLE
LAYOUT & MATERIALS PLAN
SHEET 8 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
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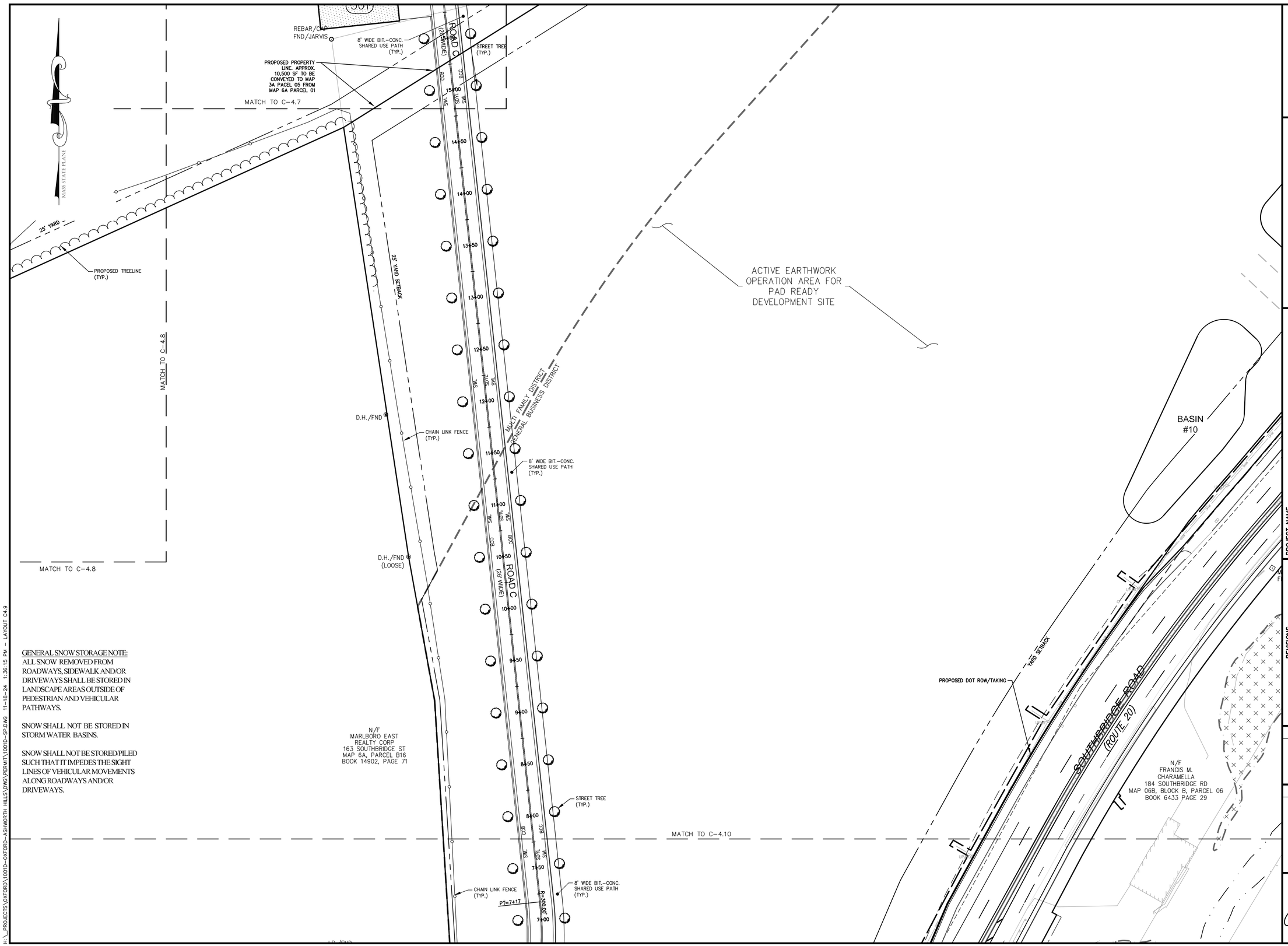
C-4.8



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SHEET TITLE

LAYOUT & MATERIALS PLAN

SHEET 9 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.9

MATCH TO C-4.10

I.P./FND

MULTI FAMILY DISTRICT
GENERAL BUSINESS DISTRICT

5' YARD SETBACK

CHAIN LINK FENCE (TYP.)

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

PT=7+17

R=300.00'

7+50

7+00

6+50

6+00

STREET TREE (TYP.)

CVB

BOC

SW

ROAD C
50'
(26' WIDE)

PC=5+02

5+50

5+00

4+50

4+00

3+50

3+00

DOUBLE YELLOW STRIPING

PT=3+85

PAINTED YELLOW

R=275.00'

2+50

2+00

PC=1+33

1+50

1+00

0+50

0+00

8' WIDE BIT.-CONC. SHARED USE PATH (TYP.)

HANDICAP RAMP (TYP.)

5' WIDE PAINTED CROSSWALK (TYP.)

BCC

SW

CCB

FOREBAY #13

D.H./FND

I.P./FND

R=180.00'

19.0'

26.0'

21.0'

CHAIN LINK FENCE (TYP.)

STREET TREE (TYP.)

BC=0+67

IND

24.0'

76.0'

PROPOSED TEMPORARY ACCESS #2

INSTALL STREET & STOP SIGN (TYP.)

PROPOSED DOT TAKING

SOUTHBRIDGE ROAD
(ROUTE 20)

BASIN
#11

ACTIVE EARTHWORK OPERATION AREA FOR PAD READY DEVELOPMENT SITE

PROPOSED DOT TAKING

TP 215-1
EG=638.0±
ESHGW @ 96"(630.0±)

MATCH TO C-4.10

N/F
MARLBORO EAST
REALTY CORP
163 SOUTHBRIDGE ST
MAP 6A, PARCEL B16
BOOK 14902, PAGE 71

N/F
MARLBORO EAST REALTY
CORP
169 SOUTHBRIDGE ST
MAP 6A, PARCEL B16.04
BOOK 14902, PAGE 74

N/F
MARLBORO EAST REALTY
CORP
171 SOUTHBRIDGE ST
MAP 6A, PARCEL B16.03
BOOK 14902, PAGE 74

N/F
ECHO REALTY TRUST
180 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 04
BOOK 47710 PAGE 298

N/F
JHI REALTY, LLC
731 MAIN ST
MAP 06B, BLOCK B, PARCEL 11
BOOK 66913 PAGE 365

#180

N/F
RAYMOND E SHEA, JR
MAP 06B, BLOCK A, PARCEL 1.01
BOOK 7305 PAGE 296

N/F
ANCHOR REALTY GROUP LLC
727-729 MAIN STREET
MAP 06B, BLOCK B, PARCEL 12
BOOK 60035 PAGE 371

MAIN STREET
(ROUTE 12)

N/F
WILLIAM J.
SULLIVAN, LLC
725 MAIN STREET
MAP 06B, BLOCK B, PARCEL 16
BOOK 66843 PAGE 232

N/F RDDR, LLC
178 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 03
BOOK 68325 PAGE 52

N/F
NEW ENGLAND
POWER CO.
423 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 08
BOOK 6627 PAGE 1

N/F 204-206 BARRE PAXTON
REALTY LLC
176 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 02
BOOK 68325 PAGE 52

N/F
WILLIAM J.
SULLIVAN, LLC
723 MAIN STREET
MAP 06B, BLOCK B, PARCEL 16.01
BOOK 66843 PAGE 232

MASS STATE PLANE

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SHEET TITLE

LAYOUT &
MATERIALS PLAN

SHEET 10 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-4.10

MASSACHUSETTS TURNPIKE
INTERSTATE ROUTE 90
(P.B. 203, PL. 23)
(P.B. 203, PL. 94)

N/F
TRACEY COULTER
SETH COULTER
13 ASHWORTH DR
MAP 3, PARCEL A8.01
BOOK 41264, PAGE 35

N/F
JAMES ESCOLAS
20 ASHWORTH DR
MAP 3, PARCEL A9.02
BOOK 21808, PAGE 193

N/F
GERALD GRAHAM
21 ASHWORTH DR
MAP 3, PARCEL A08
BOOK 34792, PAGE 220

N/F
KAREN ESCOLAS 2021
REVOCABLE TRUST
22 ASHWORTH DR
MAP 3, PARCEL A9
BOOK 65129, PAGE 175

N/F
CHRISTINE KOSTOROSKI, JACOB YOUNG
KEM CHANTY (UNIT B)
25A & 25B ASHWORTH DR
MAP 3, PARCEL A05.01
BOOK 70707, PAGE 140
BOOK 55108, PAGE 57

N/F
RESERVE, LLC
109 TINKER HILL RD
MAP 59, PARCEL 8
BOOK 69394, PAGE 255

ASHWORTH DRIVE (PUBLIC)

ROAD A

RIP RAP FOR FES SEE DETAIL (TYP)

FES #1 INV=686.5

18" HDPE L=64' S=0.028 FT/FT

18" HDPE INV=687.8

TP1-A EG=690.0± ESHGW @ 116"(681.5±)

BASIN #1
100 YEAR STORM
SURFACE ELEV. 692.08
SAFETY BENCH ELEV.=693.1

TP1-B EG=687.5± ESHGW @ 75"(681.5±)

10' SPILLWAY ELEV.=692.15 SEE DETAIL

30" HDPE L=65' S=0.010 FT/FT

OCS1 SEE DETAIL

BASIN #1

TP1-C EG=690.5± ESHGW @ 83"(688.5±)

FOREBAY ELEV=688.6 SEE DETAIL

42" HDPE L=83' S=0.006

FES #2 INV=679.0 SEE DETAIL

RIP RAP FOR FES SEE DETAIL (TYP)

FES #3 INV=687.00 SEE DETAIL

DMH #3-5'DIA RIM=699.50 INV IN=691.40 INV OUT=687.40 S=0.005 FT/FT

BASIN ACCESS DRIVE SEE DETAIL (TYP)

42" HDPE L=145' S=0.006

8" SEWER FORCE MAIN, OFFSITE PLANS PLAN TO BE DESIGNED AND COORDINATED WITH THE OXFORD ROCHDALE SEWER DISTRICT

PUMP STATION TO BE DESIGNED BY OTHERS AND COORDINATED WITH THE OXFORD ROCHDALE SEWER DISTRICT

8" CULVERT L=207' S=0.005

OCS#2 SEE DETAIL

BASIN #2
100 YEAR STORM
SURFACE ELEV. 701.71

RE-ROUTE W/15" HDPE

MATCH TO C-5.2

MATCH TO C-5.2

POOL

POOL

PS

MASS STATE PLANE

1 2 3 4 5 6 7 8 9 10 103 104 105 106

CB1 CB2 CB3 CB4 CB5 CB6 CB7 CB8 CB9 DMH1 DMH1A DMH2 DMH3 DMH4 DMH5 DMH6 DMH7 DMH8

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GRADING & DRAINAGE PLAN

SHEET 1 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-5.1

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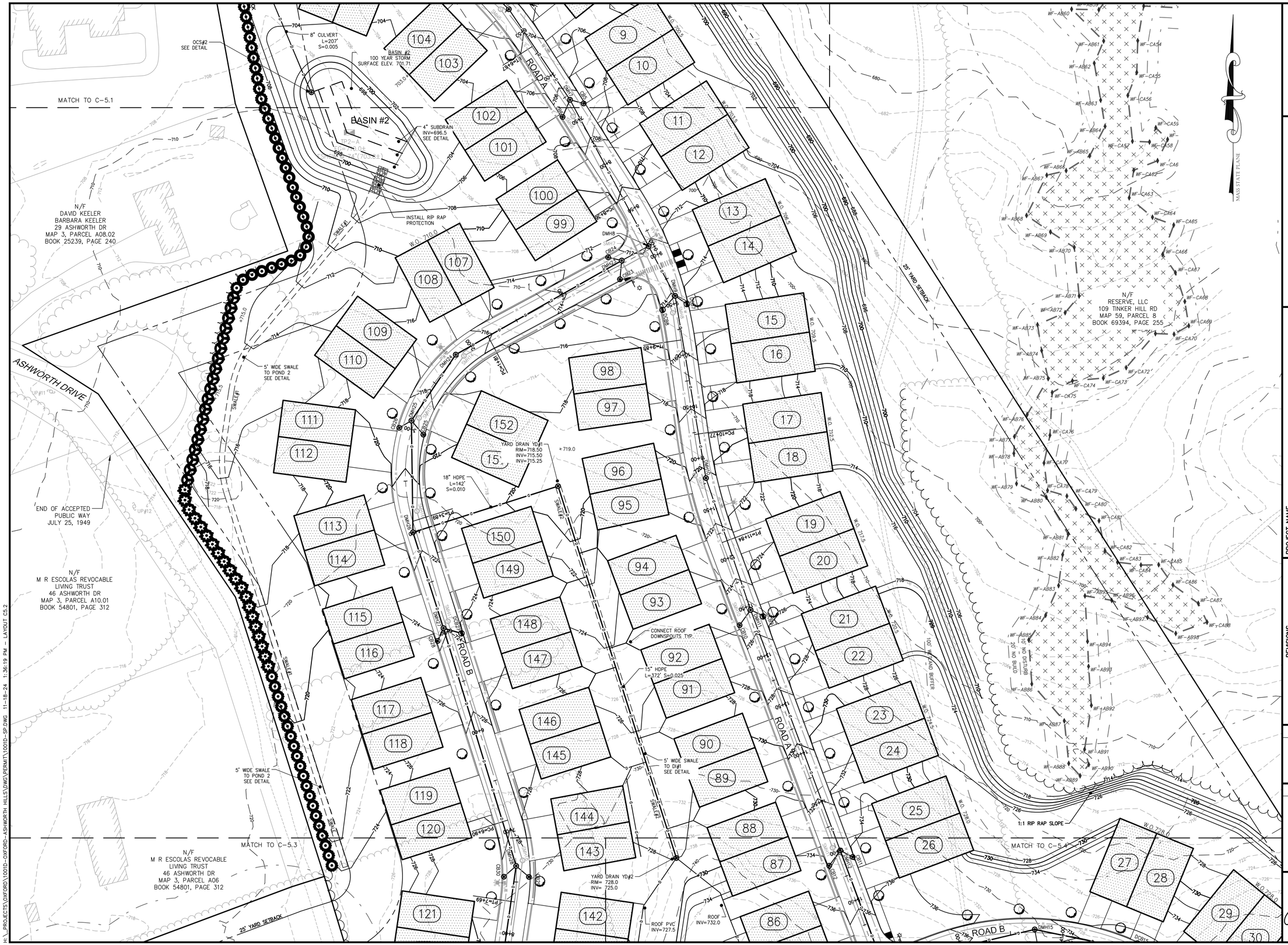

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GRADING &
DRAINAGE PLAN

SHEET 2 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
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C-5.2

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N/F
M R ESCOLAS REVOCABLE
LIVING TRUST
46 ASHWORTH DR
MAP 3, PARCEL A06
BOOK 54801, PAGE 312

MASS STATE PLANE

25' YARD SETBACK

MATCH TO C-5.2

50' BUFFER SETBACK

MATCH TO C-5.4

MATCH TO C-5.5

ROAD B

ROAD E

BASIN #3
100 YEAR STORM
SURFACE WATER ELEV. 733.3

BASIN #4
100 YEAR STORM
SURFACE ELEV. 727.09
SAFETY BENCH ELEV.=728.10

BASIN#4

FOREBAY
ELEV=723.3
SEE DETAIL

10' SPILLWAY
ELEV.=727.1

BASIN ACCESS DRIVE
SEE DETAIL (TYP)

FES #6
INV=723.00

FES #7
INV=721.50
SEE DETAIL

RIP RAP FOR FES
SEE DETAIL (TYP)

OCS#3
SEE DETAIL

OCS#4
SEE DETAIL

4" SUBDRAIN
INV=730.5
SEE DETAIL

5' WIDE SWALE
TO YD#3
SEE DETAIL

YARD DRAIN YD#2
RIM= 728.0
INV= 725.0

YARD DRAIN- YD#3
RIM=735.0
INV=731.50

YARD DRAIN- YD#5
RIM=721.5
INV=718.50

6" CULVERT-HDPE
L=204'
S=0.007

24" HDPE L=70'
S=0.010 FT/FT

24" HDPE L=109'
S=0.009 FT/FT

18" HDPE
L=150' S=0.008

12" HDPE
L=275' S=0.020

HDPE L=50'
S=0.010 FT/FT

15" HDPE
L=92' S=0.030

CONNECT ROOF
DOWNSPOUTS TYP.

ROOF PVC
INV=727.5

ROOF PVC
INV=732.0

ROOF PVC
INV=738.5

ROOF PVC
INV=740.5

ROOF PVC
INV=729.5

ROOF PVC
INV=741.5

ROOF PVC
INV=732.5

ROOF PVC
INV=736.0

ROOF PVC
INV=754.0

ROOF PVC
INV=755.0

ROOF PVC
INV=754.5

ROOF PVC
INV=741.0

ROOF PVC
INV=740.0

ROOF PVC
INV=748.0

ROOF PVC
INV=752.0

ROOF PVC
INV=753.5

ROOF PVC
INV=760.0

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VEGETATED
WETLAND

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OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

GRADING &
DRAINAGE PLAN

SHEET 3 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED
PROFESSIONAL ENGINEER

SHEET NO.

C-5.3

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:20 PM - LAYOUT C5.3

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OXFORD, MASSACHUSETTS

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(IN FEET)
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SHEET TITLE

GRADING &
DRAINAGE PLAN

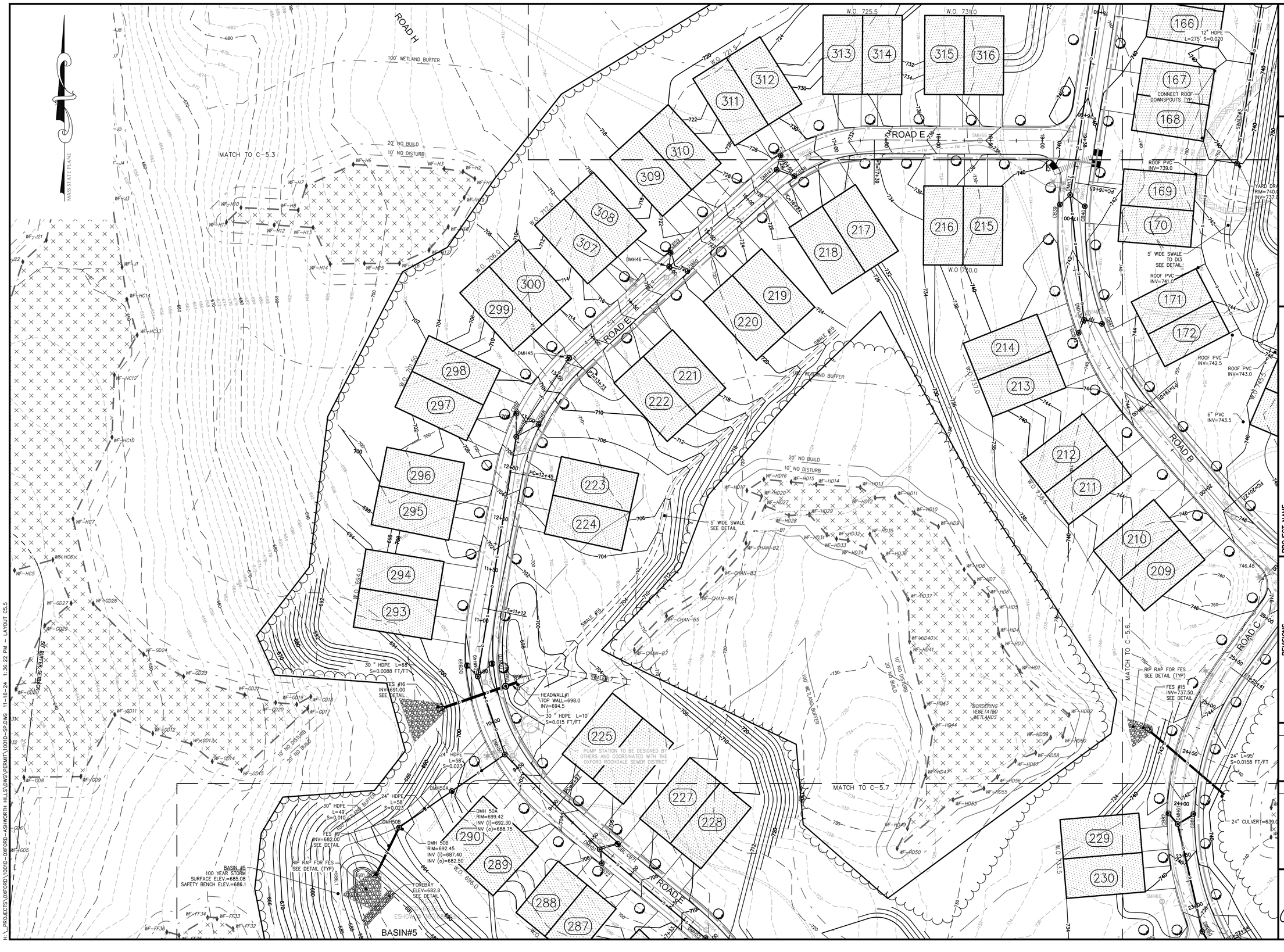
SHEET 4 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERARDINO
No. 41717
REGISTERED
PROFESSIONAL ENGINEER

SHEET NO.

C-5.4

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:21 PM - LAYOUT C5.4


MASS STATE PLANE
ROAD H
100' WETLAND BUFFER
MATCH TO C-5.3
20' NO BUILD
10' NO DISTURB
ROAD E
ROAD B
ROAD C
ROAD D
ROAD F
W.O. 725.5
W.O. 731.0
W.O. 721.5
W.O. 712.0
W.O. 706.0
W.O. 700.50
W.O. 694.0
W.O. 686.0
W.O 730.0
W.O 737.0
W.O 735.5
W.O 733.5
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169
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171
172
12" HDPE L=275' S=0.020
CONNECT ROOF DOWNSPOUTS TYP
ROOF PVC INV=739.0
ROOF PVC INV=741.0
ROOF PVC INV=742.5
ROOF PVC INV=743.0
6" PVC INV=743.5
YARD DRAIN RIM=740.0 INV=737.0
5' WIDE SWALE TO DI3 SEE DETAIL
SWALE #5
SWALE #6
SWALE #7
SWALE #8
SWALE #9
SWALE #10
SWALE #11
SWALE #12
SWALE #13
SWALE #14
SWALE #15
SWALE #16
SWALE #17
DMH44
DMH45
DMH46
DMH47
DMH48
DMH49
DMH50A
DMH50B
DMH51
DMH52
DMH53
DMH54
DMH55
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DMH78
DMH79
DMH80
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DMH83
DMH84
DMH85
DMH86
DMH87
DMH88
DMH89
DMH90

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OXFORD, MASSACHUSETTS

PREPARED FOR

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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

GRADING & DRAINAGE PLAN

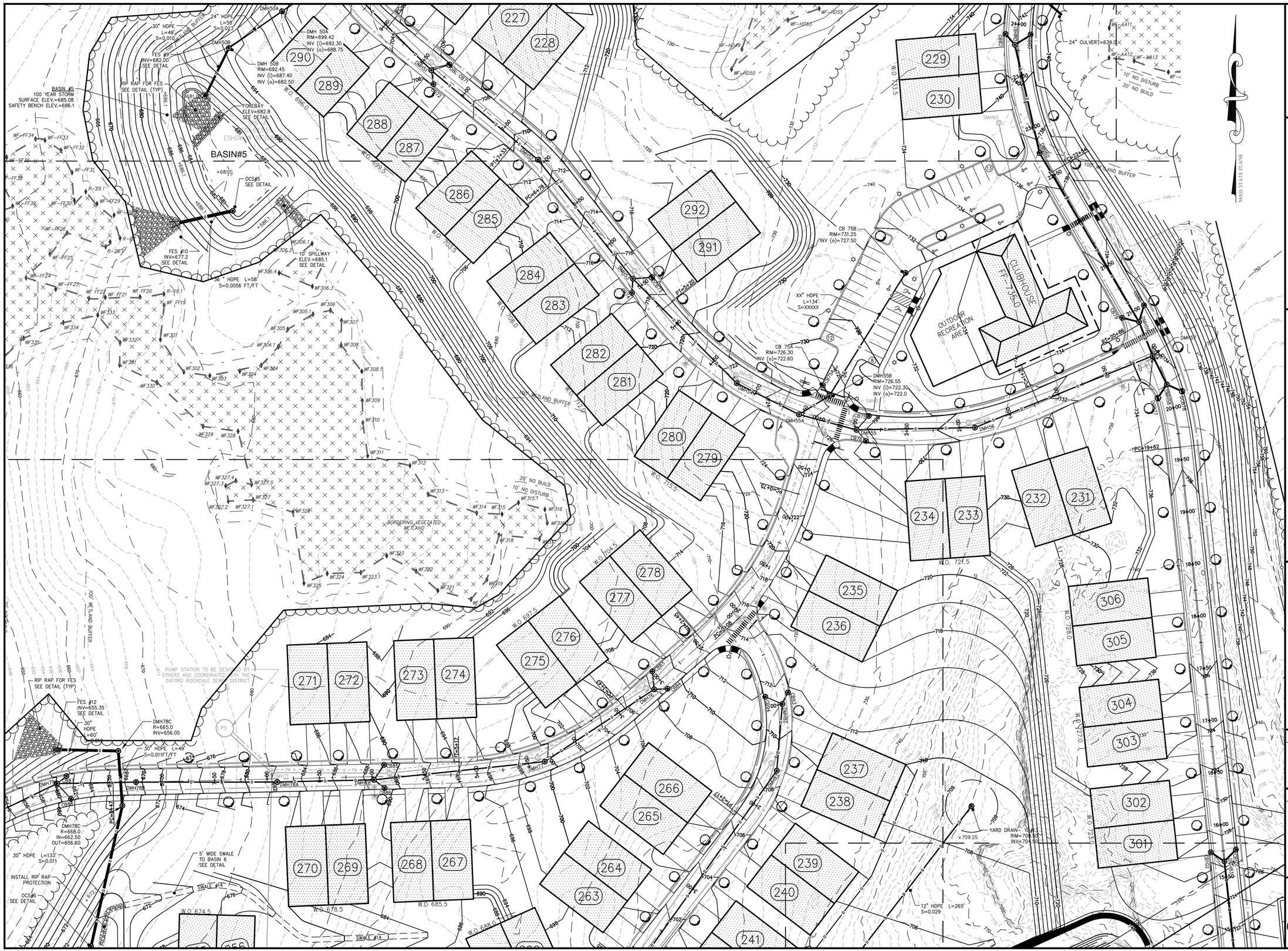
SHEET 6 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-5.6

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:24 PM - LAYOUT C5.6



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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
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(IN FEET)
1 inch = 40 feet

SHEET TITLE

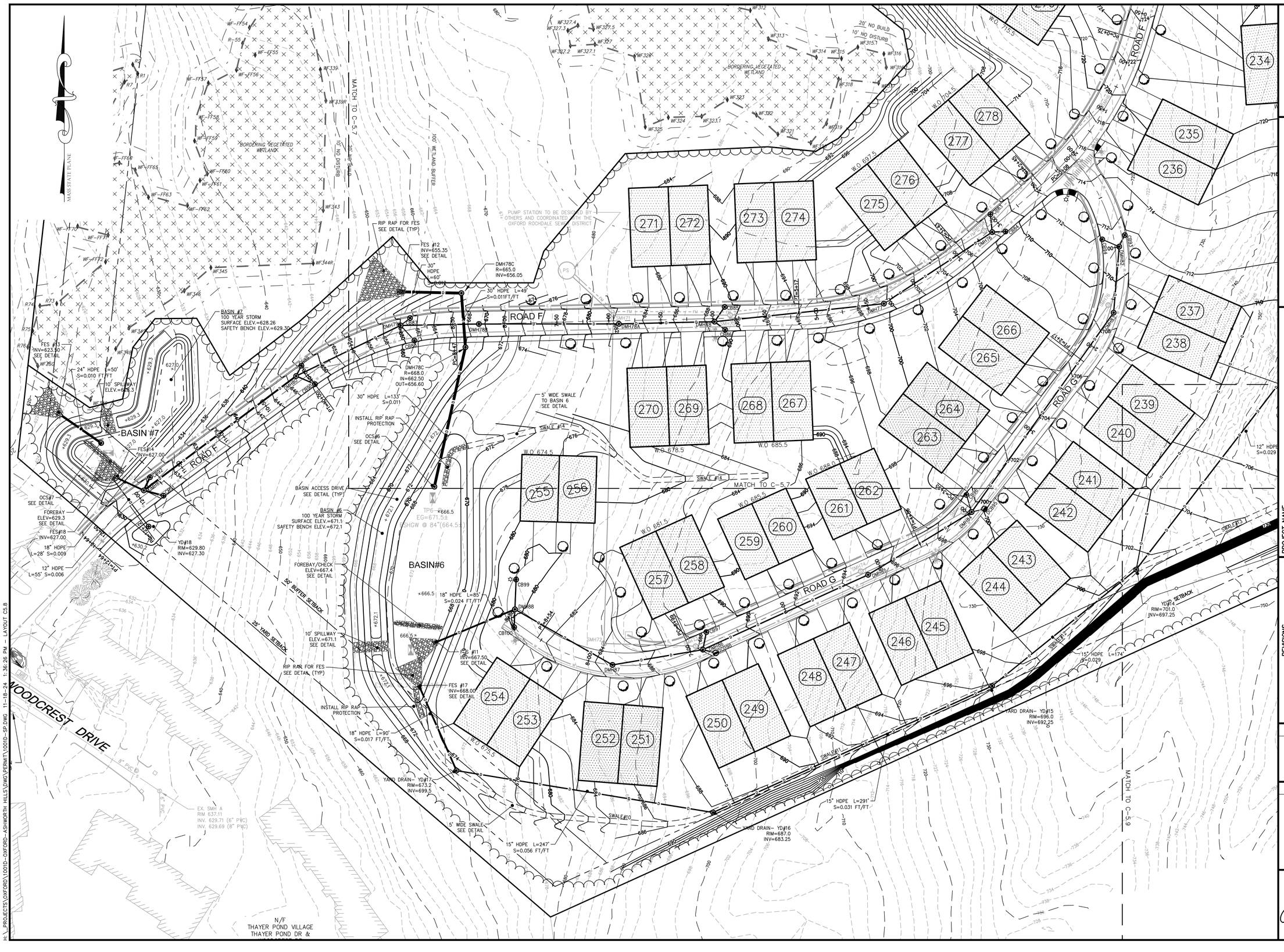
GRADING &
DRAINAGE PLAN

SHEET 7 OF 10

JAMES A. BERNARDINO
COMMONWEALTH OF MASSACHUSETTS
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-5.7



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RESIDENTIAL DEVELOPMENT

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OXFORD, MASSACHUSETTS

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GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

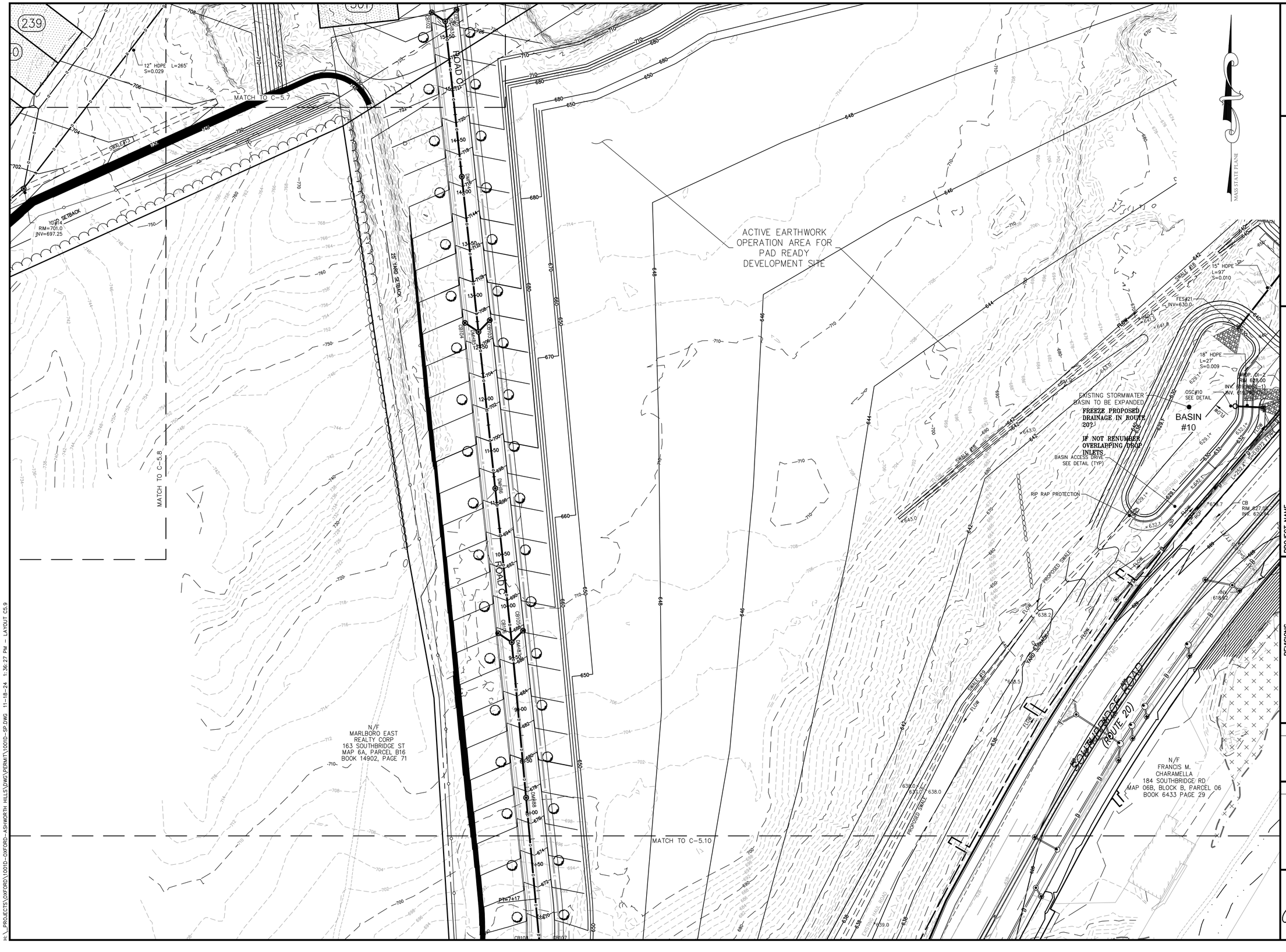
GRADING & DRAINAGE PLAN

SHEET 8 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. HARDING
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-5.8



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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

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GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

GRADING & DRAINAGE PLAN

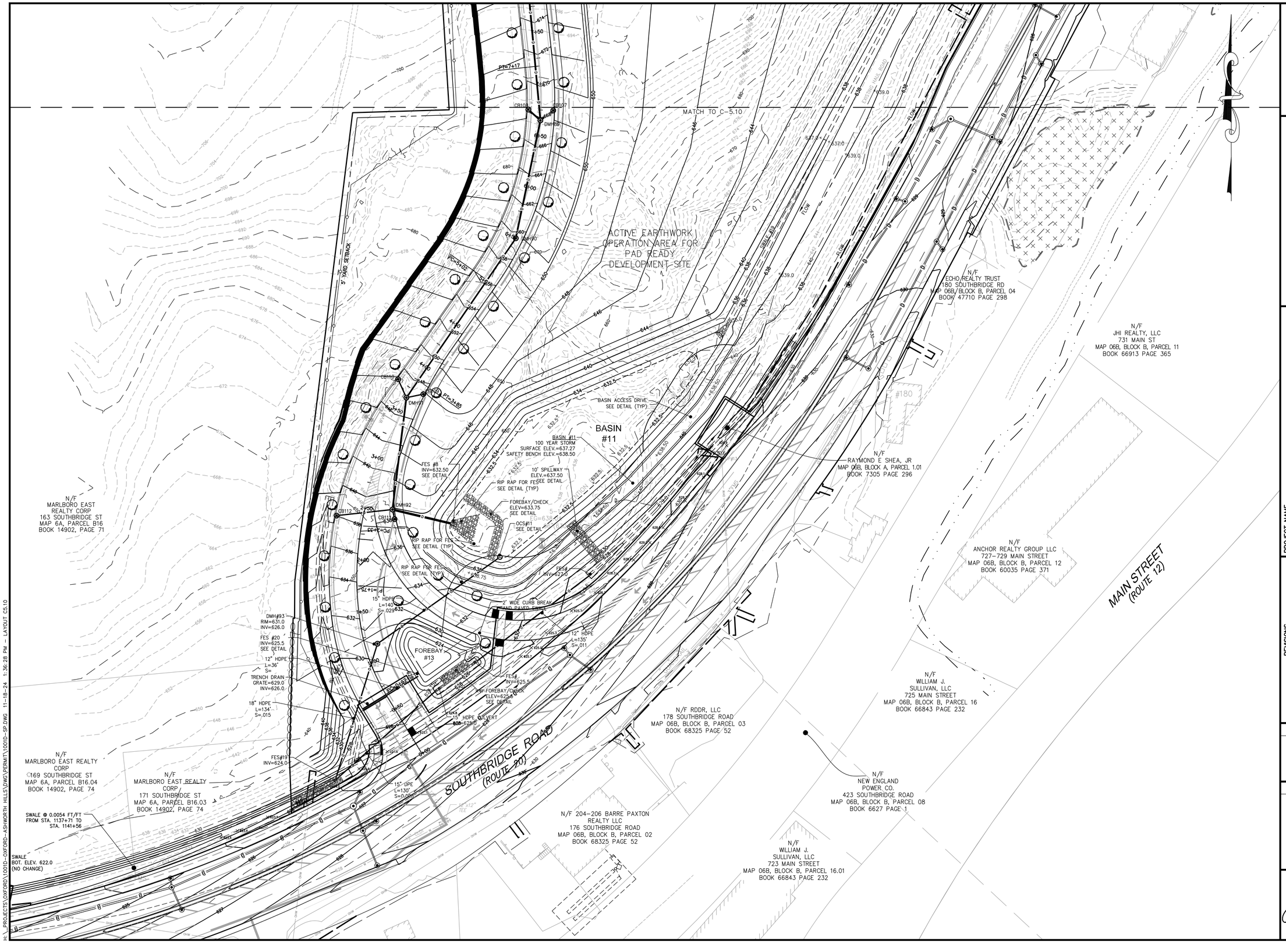
SHEET 9 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-5.9

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:27 PM - LAYOUT C5.9



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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

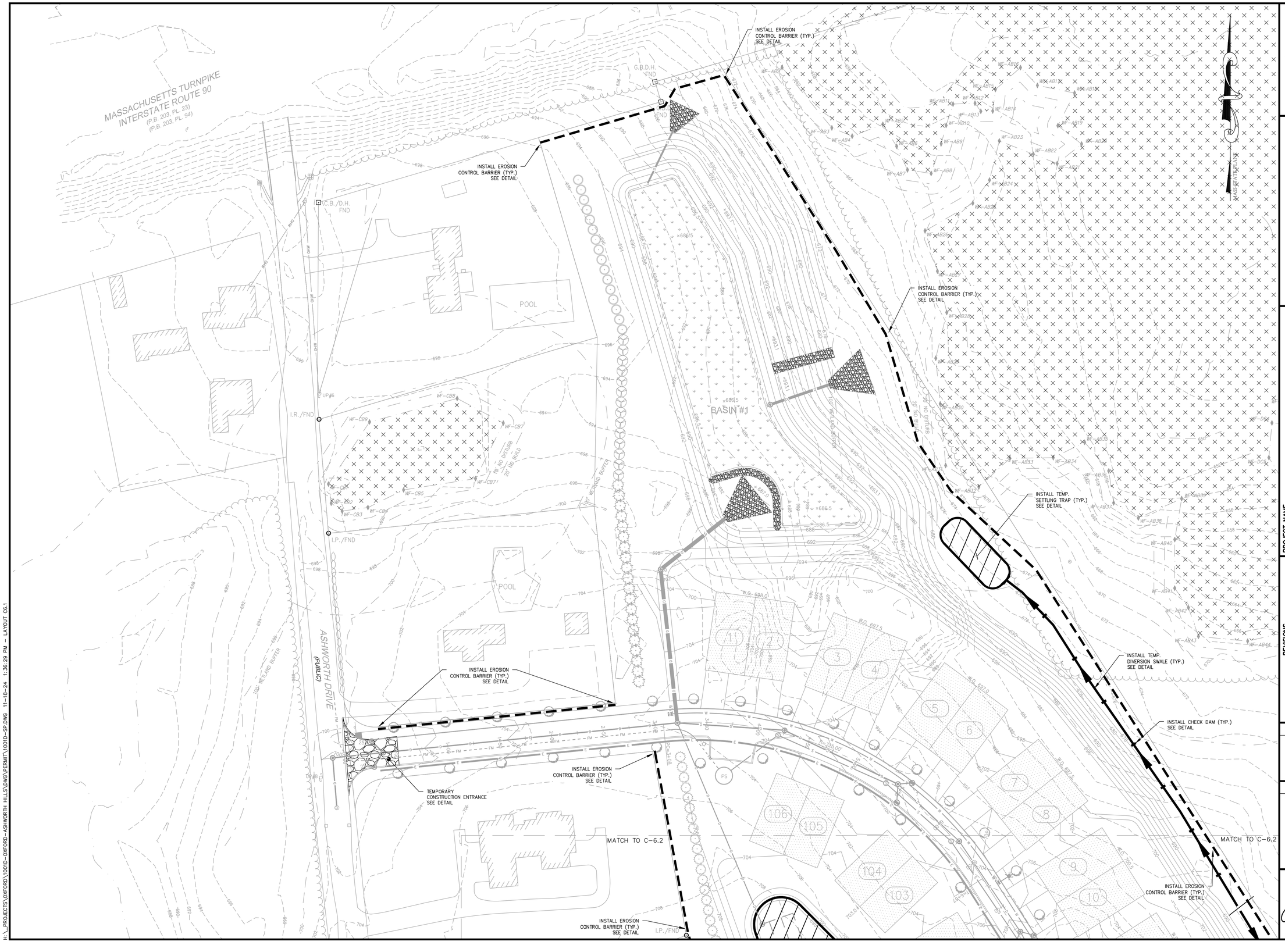
GRADING &
DRAINAGE PLAN

SHEET 10 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-5.10



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40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 1 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.1

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:29 PM - LAYOUT C6.1

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:31 PM - LAYOUT C6.2

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40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 2 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.2

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:32 PM - LAYOUT C6.3

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RESIDENTIAL DEVELOPMENT

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

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(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 3 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.3

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

MATCH TO C-6.2

ROAD A

BASIN #5

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

MATCH TO C-6.2

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

MASS STATE PLANE

ROAD B

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL CHECK DAM (TYP.) SEE DETAIL

MATCH TO C-6.3

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

ROAD D

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

ROAD B

ISOLATED WETLANDS NON-BLSF

WF-BA1 WF-BA6 WF-BA5 WF-BA4 WF-EA1

100' WETLAND BUFFER

50' WETLAND BUFFER

25' WETLAND BUFFER

WF-CD34 WF-CD37 WF-CD38 WF-CD39 WF-CD40 WF-CD41 WF-CD42 WF-CD43 WF-CD44 WF-CD45 WF-CD46 WF-CD47 WF-CD48 WF-CD49 WF-CD50 WF-CD51 WF-CD52 WF-CD53 WF-CD54 WF-CD55 WF-CD56 WF-CD57 WF-CD58 WF-EB42 WF-EB41

MATCH TO C-6.6

C.B./D.H. FND

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:33 PM - LAYOUT C6.4

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GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 4 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.4

MASS STATE PLANE

MATCH TO C-6.3

ROAD H

ROAD E

ROAD E

ROAD B

ROAD C

ROAD E

100' WETLAND BUFFER

20' NO BUILD
10' NO DISTURB

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

BORDERING VEGETATED WETLANDS

MATCH TO C-6.7

MATCH TO C-6.6

BASIN#5

TURNING POINT ENGINEERING
CIVIL SITE DESIGN
P.O. Box 757 • Sutton, MA 01590
P:(508) 381-1515 F:(508) 647-0189
www.tpecivildesign.com

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 5 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.5

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:34 PM - LAYOUT C6.5

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

MATCH TO C-6.3

MATCH TO C-6.5

MATCH TO C-6.7

ROAD B

ROAD C

ROAD D

ISOLATED WETLANDS NON-BLS

WF-BA1 WF-BA2 WF-BA3 WF-BA4 WF-BA5 WF-BA6

C.B./D.H. FND

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

MASS STATE PLANE

WF-EB38 WF-EB37 WF-EB36 WF-EB35 WF-EB34 WF-EB33 WF-EB32 WF-EB31 WF-EB28 WF-EB27 WF-EB25 WF-EB24 WF-EB23 WF-EB22

20' NO BUILD

10' NO DISTURB

BASIN #8

I.P. FND

ISOLATED VEGETATED WETLAND

WF-AA1 WF-AA2 WF-AA3 WF-AA4 WF-AA5 WF-AA6 WF-AA7 WF-AA8 WF-AA9 WF-AA10 WF-AA11 WF-AA12 WF-AA13

REBAR/END

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:35 PM - LAYOUT C6.6

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RESIDENTIAL DEVELOPMENT

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

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GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 6 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.6

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

100' WETLAND BUFFER

BASIN#5

MATCH TO C-6.5

MATCH TO C-6.6

MATCH TO C-6.8

MATCH TO C-6.9

ROAD E

ROAD F

ROAD G

ROAD C

CLUBHOUSE FF=750.0

OUTDOOR RECREATION AREA

BORDERING VEGETATED WETLAND

20' NO BUILD

10' NO DISTURB

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

INSTALL CHECK DAM (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

REBAR/CAP END/JARVIS

MASS STATE PLANE

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:36 PM - LAYOUT C6.7

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

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GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

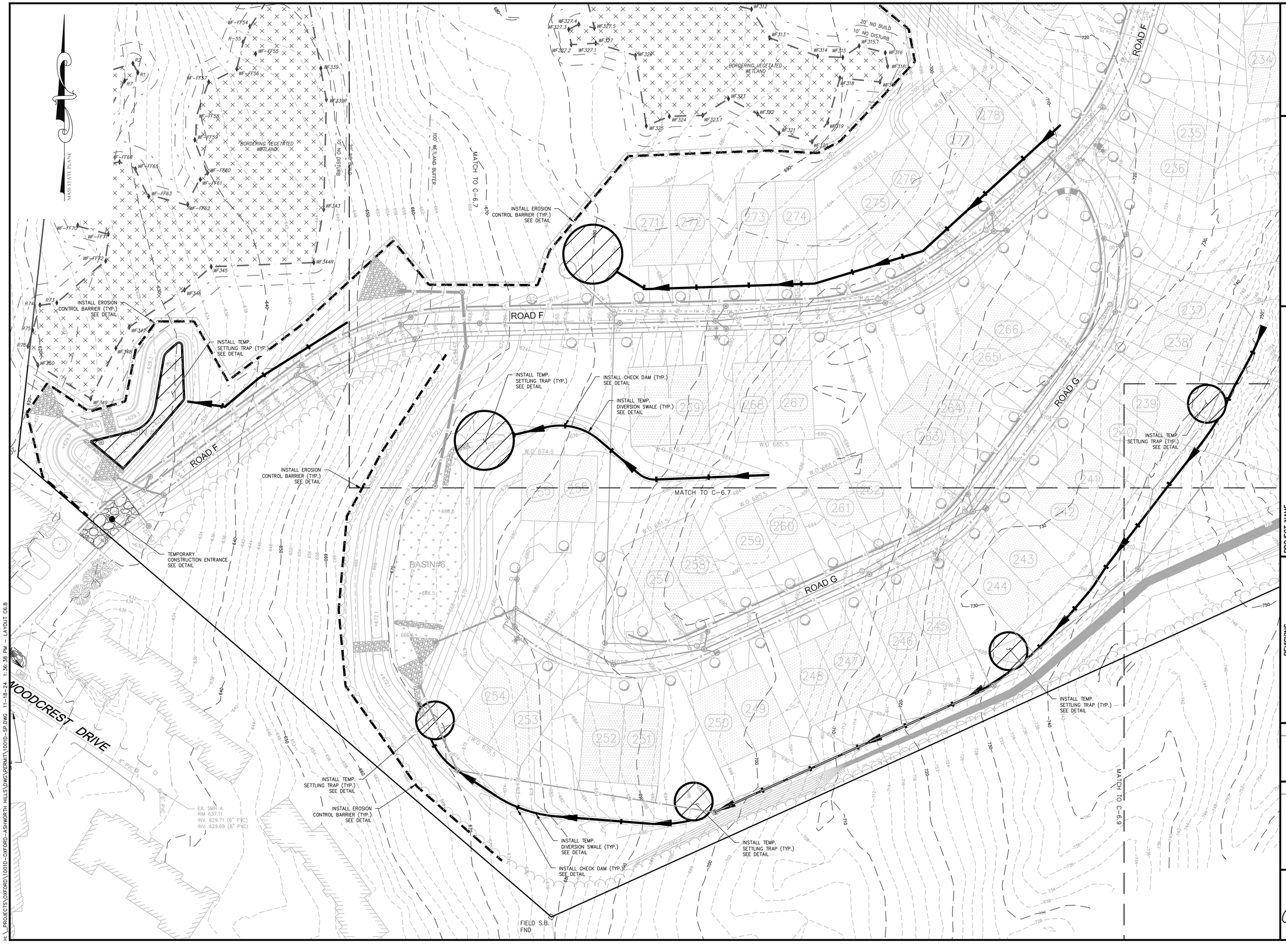
EROSION CONTROL PLAN

SHEET 7 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.7



H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:38 PM - LAYOUT C6.8

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
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PREPARED FOR

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997 Millbury Street
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(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 8 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.8

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

REBAR/CAP FND/JARVIS

ROAD C

MATCH TO C-6.7

MATCH TO C-6.8

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

D.H./FND

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

D.H./FND (LOOSE)

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

MATCH TO C-6.10

PROPOSED LOAM AND SEED AREA

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

FLOW

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

SETTLING TRAP

BASIN #1

TEMPORARY CONSTRUCTION ENTRANCE SEE DETAIL

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

SOUTHBRIDGE ROAD (ROUTE 20)

N/F
FRANCIS M.
CHARAMELLA
184 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 06
BOOK 6433 PAGE 29

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

DUDLEY HILL ROAD

MASS STATE PLANE

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APPROVAL UNDER SITE PLAN REVIEW.
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BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

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CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

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40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 9 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.9

MATCH TO C-6.10

I.P. FND

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

PROPOSED LOAM AND SEED AREA

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

EXISTING HAUL ROAD

BASIN #1

D.H. /FND

I.P. FND

INSTALL TEMP. DIVERSION SWALE (TYP.) SEE DETAIL

INSTALL EROSION CONTROL BARRIER (TYP.) SEE DETAIL

INSTALL TEMP. SETTLING TRAP (TYP.) SEE DETAIL

TEMPORARY CONSTRUCTION ENTRANCE SEE DETAIL

SOUTHBRIDGE ROAD (ROUTE 20)

MAIN STREET (ROUTE 12)

N/F
ECHO REALTY TRUST
180 SOUTHBRIDGE RD
MAP 06B, BLOCK B, PARCEL 04
BOOK 47710 PAGE 298

N/F
JHI REALTY, LLC
731 MAIN ST
MAP 06B, BLOCK B, PARCEL 11
BOOK 66913 PAGE 365

N/F
ANCHOR REALTY GROUP LLC
727-729 MAIN STREET
MAP 06B, BLOCK B, PARCEL 12
BOOK 60035 PAGE 371

N/F
WILLIAM J. SULLIVAN, LLC
725 MAIN STREET
MAP 06B, BLOCK B, PARCEL 16
BOOK 66843 PAGE 232

N/F
NEW ENGLAND POWER CO.
423 SOUTHBRIDGE ROAD
MAP 06B, BLOCK B, PARCEL 08
BOOK 6627 PAGE 1

N/F
WILLIAM J. SULLIVAN, LLC
723 MAIN STREET
MAP 06B, BLOCK B, PARCEL 16.01
BOOK 66843 PAGE 232

#180

#176

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:40 PM - LAYOUT C6.10

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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE

EROSION CONTROL PLAN

SHEET 10 OF 10

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-6.10

EROSION AND SEDIMENT CONTROL REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. FURNISH, INSTALL, AND MAINTAIN TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS, BUT NOT NECESSARILY LIMITED TO, STRAW BALE AND SILT FENCE BARRIERS, RIPRAP, VEHICLE TRACKING PADS, DIVERSION CHANNELS AND BERMS, CHECK DAMS, STRATEGICALLY LOCATED STOCKPILES, SEDIMENT BASINS, MULCH, AND SEED MIX (HEREINAFTER "CONTROL MEASURES") ADEQUATE TO PREVENT THE CONVEYANCE OF EROSION PRODUCTS (E.G. SOIL, MULCH, SOD) OFF SITE, OR INTO ENVIRONMENTALLY SENSITIVE AREAS, OR INTO AREAS WHERE WORK WILL BE ADVERSELY IMPACTED. ENVIRONMENTALLY SENSITIVE AREAS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, WETLANDS, TRIBUTARIES TO WETLANDS, WETLAND BUFFER ZONES, INTERMITTENT AND PERENNIAL STREAMS / RIVERS, AND THEIR ATTENDANT BUFFER ZONES.

ALL METHODS AND MATERIALS USED FOR EROSION CONTROL SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN "EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS A GUIDE FOR PLANNERS, DESIGNERS, AND MUNICIPAL OFFICIALS" AS PUBLISHED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF RESOURCE PROTECTION, UNLESS OTHERWISE APPROVED IN WRITING.

1. REFER TO DRAWINGS FOR LOCATION AND DETAILS OF LIMITS OF DISTURBANCE AND CONTROL MEASURES REQUIRED TO COMMENCE WORK. LIMITS OF DISTURBANCE SHALL BE MARKED WITH TAPE, SIGNS, OR ORANGE CONSTRUCTION FENCE PRIOR TO COMMENCING ANY LAND DISTURBANCE ACTIVITIES. CONTROL MEASURES WILL BE ADEQUATE ONLY FOR VEGETATION CLEARING. THE DRAWINGS ARE NOT INTENDED TO GRAPHICALLY DEPICT ALL CONTROL MEASURES THAT WILL BE REQUIRED TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A.

2. DEVISE AND EMPLOY CONTROL MEASURES THROUGHOUT THE DURATION OF PROJECT, OVER ALL AREAS DISTURBED OR UNDISTURBED BY CONSTRUCTION, AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A.

3. DEVISE AND EMPLOY TEMPORARY CONTROL MEASURES AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A, WHILE ALLOWING WORK TO PROCEED IN AN EFFICIENT, COST EFFECTIVE MANNER.

4. DEVISE, EMPLOY AND MAINTAIN CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE SITE IS PERMANENTLY STABILIZED BY ESTABLISHED VEGETATION, FINISH LANDSCAPE MATERIALS, PAVED SURFACES, AND/OR ROOF AREA.

5. ONCE THE SITE IS PERMANENTLY STABILIZED AND CERTIFIED AS SUCH BY ENGINEER, REMOVE TEMPORARY CONTROL MEASURES WHILE PROTECTING STABILIZED SURFACES.

1.02 SUBMITTALS

A. SUBMIT PRODUCT DATA, WARRANTY, AND TEST REPORTS AS INDICATED ON THE DRAWINGS.

B. SUBMIT SKETCH SHOWING LOCATIONS OF PROPOSED STOCKPILE AREAS, CONSTRUCTION ENTRANCES AND EROSION CONTROLS IF NOT SHOWN ON THE SITE PLAN OR DIFFERENT FROM THOSE LOCATIONS SHOWN ON THE SITE PLAN.

1.03 QUALITY ASSURANCE

A. COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS FROM ACCEPTABLE MANUFACTURERS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. CONFORM TO CONDITIONS OF APPROVAL ISSUED BY REGULATORY AGENCIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, LOCAL PLANNING BOARD, CONSERVATION COMMISSION, CITY COUNCIL, BOARD OF HEALTH, PUBLIC WORKS / HIGHWAY DEPARTMENT, STATE ENVIRONMENTAL PROTECTION DEPARTMENT, AND U.S. GOVERNMENT, ENVIRONMENTAL PROTECTION AGENCY. WHERE CONDITIONS OF REGULATORY APPROVAL DIFFER FROM REQUIREMENTS CONTAINED HEREIN OR ON THE DRAWINGS, COMPLY WITH THE MORE STRINGENT REQUIREMENT.

PART 2 – PRODUCTS

2.01 MATERIALS

A. STRAW BALES: WEED FREE DRY GRASS OR STRAW, MACHINE BOUND WITH JUTE OR WIRE, APPROXIMATE SIZE EACH BALE 42" X 16" X 16". EACH BALE SHALL BE STAKED WITH A MINIMUM OF TWO 24" LONG HARDWOOD STAKES. NOTE: HAY SHALL NOT BE USED.

B. STRAW WATTLES: WEED FREE DRY GRASS OR STRAW, MINIMUM 8".

C. SILT FENCE: NON–WOVEN, UV–RESISTANT, POLYPROPYLENE FABRIC, FLOW RATED AT 10 GPM/SF MINIMUM, GRAB TENSILE RATED AT 124 POUNDS MINIMUM, WITH INTEGRAL STAKE LOOPS, AND HARDWOOD STAKES. USE NO. 2130 BY AMOCO FABRICS & FIBERS, OR APPROVED EQUAL.

D. MULCH: ORGANICS INCLUDING STRAW, PROCESSED PINE / HEMLOCK TWGS AND NEEDLES.

E. SEED MIXES: SHALL MEET THE REQUIREMENTS OF MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION SECTION 6.03.0 OR 6.03.1 AS APPROPRIATE.

F. EXCELSIOR BLANKET: CURLED WOOD FIBER ON PHOTODEGRADABLE EXTRUDED PLASTIC MATRIX, 80% OF FIBERS 6–INCHES LONG OR LONGER, WEIGHT 0.975 POUNDS / SY, CONTAINING NO CHEMICAL ADDITIVES. USE CURLEX I BLANKET BY AMERICAN EXCELSIOR COMPANY, OR APPROVED EQUAL.

G. ROCK RIPRAP: SOUND, ANGULAR, 6–INCH MINUS PROCESSED ROCK, BLAST ROCK, OR TAILINGS.

H. CRUSHED STONE: SOUND, ANGULAR, 2–INCH MINUS PROCESSED CRUSHED STONE.

PART 3 – EXECUTION

3.01 THROUGHOUT CONSTRUCTION

A. DEVISE WORK SEQUENCE SO AS TO LIMIT DRAINAGE AREA THAT IS TRIBUTARY TO DISTURBED AREAS. DEVISE, EMPLOY, AND MAINTAIN CONTROL MEASURES SUCH AS DIVERSION CHANNELS AND BERMS, STRATEGICALLY LOCATED STOCKPILES, AND SEDIMENT BASINS TO SUBDIVIDE DRAINAGE AREAS INTO SMALL, MANAGEABLE SUBAREAS, THEREBY MINIMIZING RUNOFF AND THE POTENTIAL FOR EROSION.

B. MAINTAIN BARRIER AT LIMIT OF WORK AND PROTECT EXISTING VEGETATION / FACILITIES OUTSIDE OF LIMIT OF WORK.

C. MAINTAIN SPARE MATERIAL STOCKPILES FOR IMMEDIATE EMPLOYMENT / REPAIR / EXPANSION OF CONTROL MEASURES. AT A MINIMUM, SUCH MATERIALS SHALL INCLUDE HAY BALES, SILT FENCE AND STAKES, AND CRUSHED STONE.

D. INSPECT AND MAINTAIN EFFECTIVENESS OF CONTROL MEASURES BY REPAIRING AS NECESSARY TO ENSURE INTENDED FUNCTION; BY SUPPLEMENTING AS NECESSARY FOR ADEQUATE EXTENT; BY REMOVING TRAPPED PRODUCTS OF EROSION AS NECESSARY TO MAINTAIN EFFECTIVE TRAP VOLUME.

E. LIMIT EXTENT OF WORK AREA SO THAT ALL DISTURBED AREAS CAN BE STABILIZED WITH CONTROL MEASURES WITHIN A 24–HOUR PERIOD.

F. INSTALL CONTROL MEASURES AS SOON AS PRACTICABLE AFTER EACH MANAGEABLE PORTION OF EARTHWORK IS COMPLETE. EMPLOY TEMPORARY MEASURES AS NECESSARY TO STABILIZE DISTURBED AREAS, EVEN WHERE SUBSEQUENT CONSTRUCTION OPERATIONS MAY REQUIRE RE–DISTURBANCE.

PART 3 – CONTINUED

G. WHEN INTENSE RAINFALL IS EXPECTED, CONSIDER, DEVISE, AND EMPLOY REINFORCING CONTROL MEASURES PRIOR TO THE RAINFALL EVENT TO MEET THE REQUIREMENTS DESCRIBED IN 1.01.A. IF NECESSARY, EMPLOY TEMPORARY CONTROL MEASURES ON MATERIAL STOCKPILES TO COUNTERACT POTENTIAL SEDIMENT TRANSPORT DURING INTENSE RAINFALL.

H. WHEN VEHICLE REFUELING IS REQUIRED ON SITE, CONDUCT REFUELING OPERATIONS OUTSIDE OF ENVIRONMENTALLY SENSITIVE AREAS.

I. PROPERLY DISPOSE OF DEBRIS, SOLID WASTE, TRASH, AND CONSTRUCTION WASTE / BYPRODUCTS OFF SITE.

J. SWEEP ON–SITE PAVED AREAS AND OFF–SITE STREETS AS NECESSARY TO PREVENT SILT AND DEBRIS ORIGINATING ON SITE FROM ENTERING CLOSED DRAINAGE SYSTEMS AND / OR ENVIRONMENTALLY SENSITIVE AREAS. WHEN NECESSARY UTILIZE WATER SPRAYING, SURFACE ROUGHENING AND/OR APPLY POLYMERS, SPRAY–ON TACKIFIERS, CHLORIDES AND BARRIERS FOR DUST CONTROL.

K. INSPECT EROSION CONTROLS DAILY THROUGHOUT CONSTRUCTION REPAIR DAMAGED CONTROLS IMMEDIATELY.

3.02 SITE PREPARATION AND ACCESS

A. WALK SITE AND IDENTIFY LOCATIONS OF LIMIT OF WORK AND ENVIRONMENTALLY SENSITIVE AREAS. ESTABLISH CONSTRUCTION STAGING AREA, LOCATED BEYOND ENVIRONMENTALLY SENSITIVE AREAS.

B. INSTALL CONTROL MEASURES AS SHOWN ON THE DRAWINGS, INCLUDING THOSE DEFINING THE LIMIT OF WORK.

C. LIMIT VEHICULAR TRAFFIC TO AND FROM SITE TO MINIMIZE TRANSPORT OF SEDIMENT.

3.03 CLEARING, GRUBBING, AND STRIPPING

A. SCHEDULE GRUBBING AND STRIPPING TO OCCUR IMMEDIATELY PRIOR TO EARTH DISTURBANCE. DEPENDING ON SITE AREA, CONSIDER MULTIPLE GRUBBING PHASES, SEQUENCED TO TAKE ADVANTAGE OF THE EROSION PREVENTION POTENTIAL OF EXISTING VEGETATIVE COVER.

B. MINIMIZE THE AREA OF EXISTING VEGETATION REMOVED WHEREVER POSSIBLE. NO GREATER THAN FIVE (5) ACRES SHALL BE UNSTABLE AT ANY TIME.

C. LOCATE AND SIZE STOCKPILES TO MINIMIZE EROSION POTENTIAL, TAKING ADVANTAGE OF TERRAIN SLOPE AND ASPECT, WHERE APPROPRIATE.

D. PROTECT VEGETATION, INCLUDING ROOT SYSTEMS, BEYOND LIMIT OF CLEARING.

E. PROCESS TIMBER, STUMPS, SLASH, AND BRUSH SO AS TO PROTECT ENVIRONMENTALLY SENSITIVE AREAS AND INSTALLED CONTROL MEASURES. PROPERLY DISPOSE OF EXCESS OFF SITE. BURIAL OF STUMPS ON SITE IS PROHIBITED.

3.04 EXCAVATION FOR BUILDING FOUNDATIONS AND UTILITIES

A. DEVISE AND INSTALL CONTROL MEASURES ADEQUATE TO HANDLE DISCHARGES AND TRAP SEDIMENT FROM FOOTING SUMP AND WELL POINT PUMPS PRIOR TO EXCAVATION.

B. ARMOR SUMP PUMP DISCHARGE LOCATIONS TO PREVENT EROSION AT POINT OF DISCHARGE AND AREAS DOWNSTREAM.

C. IF FOUNDATION EXCAVATIONS GRADE TO DAYLIGHT ON THE LOW SIDE, DEVISE AND INSTALL CONTROL MEASURES TO HANDLE SURFACE AND GROUNDWATER FLOW FROM EXCAVATION LOW POINT.

D. STOCKPILE EXCAVATED MATERIALS TO BAFFLE OVERLAND RUNOFF, AVOIDING THE CREATION OF LENGTHY PATHS OF CONCENTRATED RUNOFF. STOCKPILE SLOPES SHALL NOT EXCEED 2:1.

E. BACKFILL UTILITY TRENCHES AS SOON AS PRACTICABLE TO PREVENT FLOODING, SLOUGHING, POTENTIAL OVERFLOW, AND REPETITIVE EARTH DISTURBANCE.

3.05 SITE GRADING

A. WHERE APPLICABLE, FOLLOW EXCAVATION AND FILL PRACTICES SHOWN ON DRAWINGS TO LOCALIZE AND MINIMIZE EROSION.

B. MONITOR SEDIMENT VOLUME IN TEMPORARY SEDIMENT BASINS AND AT DIVERSION BERMS AND CHECK DAMS. IN ALL AREAS EXCEPT THOSE THAT DO NOT PRESENT POTENTIAL PROBLEMS WITH REGARD TO FUTURE SOIL STABILITY, DRAINAGE, OR BEARING CAPACITY, REMOVE AND PROPERLY DISPOSE OF TRAPPED SEDIMENT BEFORE BRINGING SITE TO FINAL SUBGRADE.

C. EXPOSED SOILS SHALL BE PERMANENTLY STABILIZED WITHIN FIVE (5) BUSINESS DAYS OF COMPLETION OF CONSTRUCTION OF A GIVEN AREA. EXPOSED AREAS WHERE NO WORK HAS OCCURRED FOR FOURTEEN (14) DAYS SHALL BE TEMPORARILY STABILIZED WITH HYDROSEED OR OTHER APPROVED METHOD.

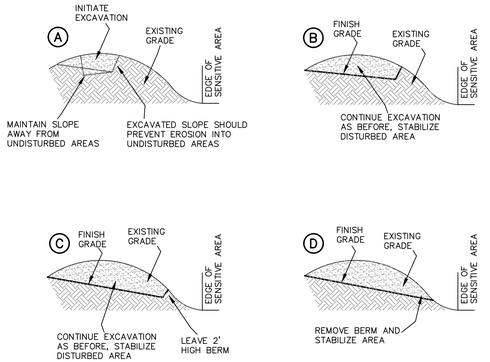
D. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED IMMEDIATELY AFTER COMPLETION.

3.06 LANDSCAPING

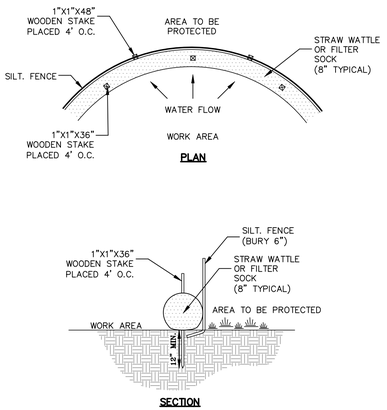
A. COMPLETE LANDSCAPING AS SOON AS POSSIBLE AFTER COMPLETION OF FINAL SUBGRADE.

B. IMMEDIATELY AFTER PLACEMENT OF TOPSOIL, STABILIZE WITH CONTROL MEASURES INCLUDING, BUT NOT NECESSARILY LIMITED TO, SEED MIX, MULCH, AND / OR BLANKET.

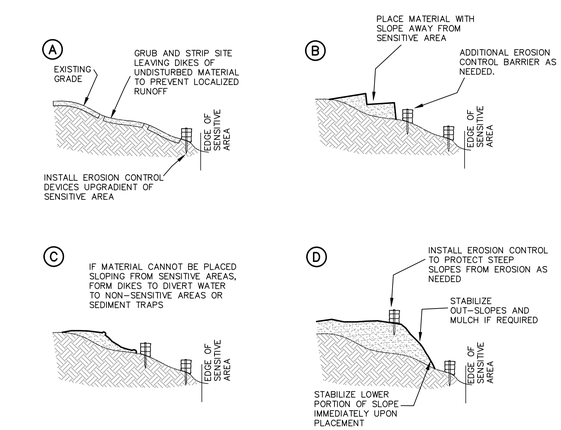
C. PERMANENT SEEDING MAY BE PERFORMED IN THE SPRING PRIOR TO JULY 1 AND IN BETWEEN AUGUST 1 AND OCTOBER 15. PERMANENT SEEDING AT OTHER TIMES SHALL BE APPROVED AND SHALL ONLY BE ALLOWED WITH AN APPROVED MULCHING AND IRRIGATION PROGRAM.



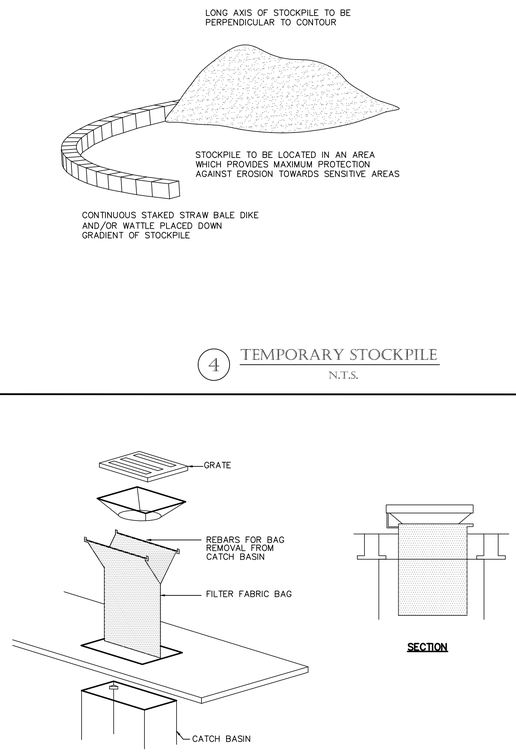
1 EXCAVATION PROCEDURE
N.T.S.



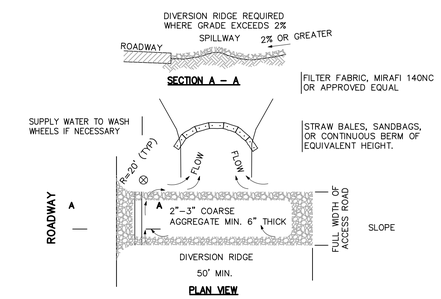
2 EROSION CONTROL BARRIER (ECB)
N.T.S.



3 FILL PROCEDURE
N.T.S.



4 TEMPORARY STOCKPILE
N.T.S.



NOTES:
[1] THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
[2] WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.
[3] WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
[4] USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

5 CONSTRUCTION ENTRANCE
N.T.S.

NOTES:
[1] TO BE SILTSTACK BY ATLANTIC CONSTRUCTION FABRICS, INC., OR APPROVED EQUAL.
[2] TO BE INSTALLED IMMEDIATELY FOLLOWING THE INSTALLATION OF CATCH BASIN STRUCTURE AND REMAIN UNTIL FINISH COURSE IS PLACED.
[3] FILTER BAG SHALL BE MAINTAINED AND CLEANED AS NEEDED.

6 CATCH BASIN FILTER BAG
N.T.S.

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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE–1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D–SP.DWG
PLAN NO.	L–458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EROSION CONTROL PLAN, NOTES & DETAILS
SHEET 1 OF 2

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C–6.11

H:_PROJECTS\OXFORD\1001D–OXFORD–ASHWORTH HILLS\DWG\PERMIT\1001D–SP.DWG 11–18–24 1:36:40 PM – LAYOUT C6.11

GENERAL CONDITIONS

1. IF EROSION CONTROL MEASURES ARE DAMAGED BY CONSTRUCTION VEHICLES, ACTS OF VANDALISM, OR SEVERE WEATHER CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY REMOVE SEDIMENT IN THE VICINITY OF THE EROSION CONTROL MEASURES AND REPAIR THESE MEASURES TO A FUNCTIONAL CONDITION.
2. IF, DURING OR AFTER CONSTRUCTION, IT BECOMES APPARENT THAT EXISTING EROSION CONTROL MEASURES ARE INCAPABLE OF CONTROLLING EROSION, THE ENGINEER OR THE CITY MAY REQUIRE ADDITIONAL CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO; ADDITIONAL WATTLES, SILT FENCE, SEDIMENT BASINS, OR MULCH.
3. ALL TEMPORARILY FILL SHALL BE STABILIZED DURING USE TO PREVENT EROSION AND SHALL BE SUITABLY CONTAINED TO PREVENT SEDIMENT OR OTHER PARTICULATE MATTER FROM RENTERING A WETLAND OR WATERCOURSE. ALL AREAS AFFECTED BY TEMPORARY FILLS MUST BE RESTORED TO THEIR ORIGINAL CONTOURS OR AS DIRECTED BY THE OWNER, AND REVEGETATED. THE EXTENT OF TEMPORARY FILL OR EXCAVATION SHALL BE CONFINED TO THAT AREA NECESSARY TO PERFORM THE WORK, AS APPROVED BY THE OWNER.
4. DUMPING OF OIL, CHEMICALS OR OTHER DELETERIOUS MATERIALS ON THE GROUND IS FORBIDDEN. THE CONTRACTOR SHALL PROVIDE A MEANS OF CATCHING, RETAINING, AND PROPERLY DISPOSING OF DRAINED OIL, REMOVED OIL FILTERS, OR OTHER DELETERIOUS MATERIAL. ALL SPILLS OF SUCH MATERIALS SHALL BE REPORTED IMMEDIATELY BY THE CONTRACTOR TO APPROPRIATE CITY AND STATE AGENCIES.
5. EPA–NPDES STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR CONSTRUCTION ACTIVITIES IS REQUIRED.
6. INSPECTIONS: EROSION CONTROL SHALL BE INSPECTED WEEKLY OR AFTER A STORM EVENT WITH 0.25" PRECIPITATION ACCUMULATION. INSPECTION SHALL BE RECORDED IN A LOG ALONG WITH TIME AND DATE. LOG SHALL BE AVAILABLE FOR INSPECTION BY THE TOWN OFFICIALS UPON REQUEST.

PROPOSED SEQUENCE OF CONSTRUCTION:

1. CONDUCT A PRE–CONSTRUCTION MEETING WITH APPLICABLE TOWN STAFF, PEER REVIEW CONSULTANTS, AND ENGINEER OF RECORD.
2. OBTAIN ALL APPLICABLE PERMITS FROM THE TOWN AND STATE BEFORE STARTING ANY WORK ON THE SITE.
3. INSTALL EROSION CONTROLS AS SHOWN ON THE PLAN AND DETAILS.
4. DISCONNECT APPLICABLE UTILITIES AND SERVICES TO THE EXISTING BUILDINGS. ONCE UTILITIES ARE PROPERLY TERMINATED, CONTRACTOR MAY DEMOLISH EXISTING SITE FEATURES.
5. ROUGH GRADE THE SITE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
6. CONSTRUCT ROADWAYS, PER THE SITE PLAN.
7. INSTALL ALL SUBSURFACE UTILITIES AND STORMWATER CONVEYANCE/ TREATMENT STRUCTURES.
8. COMMENCE WITH FOUNDATION AND DWELLING UNIT CONSTRUCTION
9. FINALIZE PROPOSED SITE IMPROVEMENTS PER THE APPROVED SITE PLAN. INSTALL GROUND COVER TREATMENT PER THE LANDSCAPE PLAN TO STABILIZE ANY DISTURBED AREAS.
10. COORDINATE FINAL APPROVALS WITH ENGINEER OF RECORD & APPLICABLE TOWN DEPARTMENTS.
11. REMOVE ALL EROSION CONTROL MEASURES FROM THE SITE AND PROPERLY DISPOSE OF MEASURES OFF–SITE.

DESCRIPTION AND MAINTENANCE OF EROSION CONTROLS:

SILT FENCING :
INSTALL SILT FENCE AT VARIOUS LOCATIONS AS SHOWN ON THE PLANS AND DETAILS. EMBED THE SILT FENCE INTO THE GROUND AND FIRMLY ANCHOR IT AS SHOWN IN THE DETAILS. REMOVE SEDIMENT ONCE LEVELS HAVE REACHED 1/4 OF THE EFFECTIVE FENCE–HEIGHT. REPAIR AND OR/ REPLACE IMMEDIATELY IF DAMAGED OR DETERIORATED.

CONSTRUCTION ENTRANCE:
PLACE 1 ~ 3" STONE ON A GEOTEXTILE FILTER FABRIC ALONG A STABLE FOUNDATION. CONSTRUCTION ACCESS SHALL BE INSPECTED WEEKLY OR AFTER A HEAVY RAIN EVENT. MUD AND SEDIMENT TRACKED OR WASHED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. ONCE MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE GRAVEL, THE PAD SHOULD BE TOP DRESSED WITH STONE. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

SILT SACK DROP INLET PROTECTION:
SILT SACK OR APPLICABLE FABRIC DROP INLET PROTECTION DEVICE SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS. TRAPPING DEVICES AND STRUCTURES THEY PROTECT SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP.

TEMPORARY STABILIZATION:

TOP SOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED AND MULCH PROCEDURES AND SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE ARCHITECT'S RECOMMENDATIONS. AREAS OF THE SITE WHICH ARE TO BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB–BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED

DUST CONTROL:

TAKE PRECAUTIONS TO PREVENT DUST FROM BECOMING A NUISANCE TO ABUTTING PROPERTY OWNERS. BROOM OFF PAVEMENTS ADJOINING THE EXCAVATION ON A DAILY BASIS. COVER AND/OR KEEP MOIST ALL EARTH STOCKPILES AT ALL TIMES. USE CALCIUM CHLORIDE TO CONTROL DUST OVER CERTAIN AREAS OF THE SITE, AS DIRECTED BY THE ENGINEER OR SHOWN ON THE PLANS. CALCIUM CHLORIDE SHALL CONFORM TO ASTM D–98, TYPE I. THE CONTRACTOR SHALL MAINTAIN AND INSPECT, ON A DAILY BASIS, THE ADEQUACY OF DUST CONTROL MEASURES AND CORRECT ANY DEFICIENCIES IMMEDIATELY.

PERMANENT STABILZATION MEASURES:

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED AND MULCH SPECIFICATIONS AND PROCEDURE SHALL BE IN ACCORDANCE WITH THE LANDSCAPE ARCHITECT'S RECOMMENDATIONS.

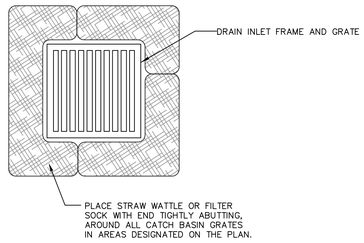
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LANDSCAPED AREAS. IF TOPSOIL, SEED, AND/OR MULCH IS WASHED AWAY BY RAINFALL, THE CONTRACTOR SHALL RESTORE THE AREA.

GENERAL CONTROLS:

WASTE DISPOSAL:
THE CONTRACTOR SHALL PROVIDE AN ADEQUATE NUMBER OF COVERED WASTE CONTAINERS TO ENSURE THAT NO LITTER, DEBRIS, BUILDING MATERIALS, OR SIMILAR MATERIALS ARE DISCHARGED TO WETLANDS OR WATERCOURSES. THE CONTRACTOR SHALL INSTRUCT SUBCONTRACTORS TO USE THE CONTAINERS FOR WASTE MATERIAL. THE CONTRACTOR SHALL BE PROMPTLY EMPTIED WHEN FULL.

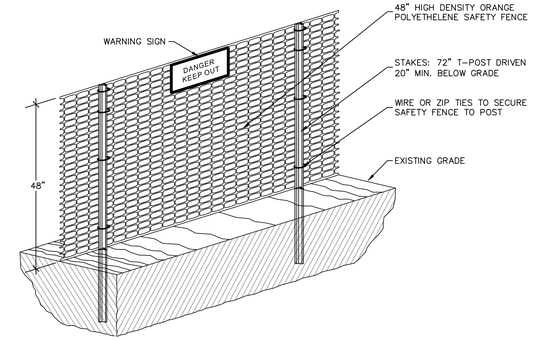
PAVEMENT MAINTENANCE:
THE CONTRACTOR SHALL SWEEP PAVED ROADWAYS ADJACENT TO THE SITE ON A ROUTINE BASIS TO PREVENT TRACKING OF MUD ONTO PUBLIC ROADWAYS AND WASHING OF MUD INTO WATERWAYS. IF THE CONTRACTOR'S SCHEDULE FOR CLEANING THE PAVEMENT IS FOUND TO BE INADEQUATE BY THE OWNER, OWNER'S REPRESENTATIVE, OR CITY, THE CONTRACTOR SHALL INCREASE THE FREQUENCY AT NO ADDITIONAL COST TO THE OWNER.

PROHIBITED DISCHARGES:
CONTRACTOR SHALL PREVENT DAILY CONSTRUCTION MATERIALS AND WASTE FROM ENTERING ANY WETLANDS OR WATERCOURSES, INCLUDING BUT NOT LIMITED TO; CONTAMINATED GROUNDWATER, CONCRETE WASHOUT, FUELS, SOAPS OR SOLVENTS, PAINT, TOXIC SUBSTANCES, ETC.

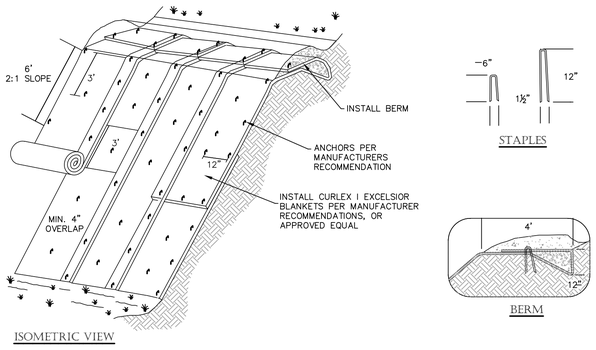


1 CATCH BASIN STRAW WATTLE/FILTER SOCK
N.T.S.

NOTES:
[1] ALL ACTIVE CONSTRUCTION AREAS SHALL BE PROTECTED PER PLAN.
[2] SAFETY FENCE SHALL BE FASTENED SECURELY TO T–POSTS.
[3] FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE SAFETY FENCE MUST BE APPROVED.
[4] "DANGER KEEP OUT SIGNS TO BE SPACED AT 100 FOOT INTERVALS.



2 CONSTRUCTION SAFETY FENCE
N.T.S.



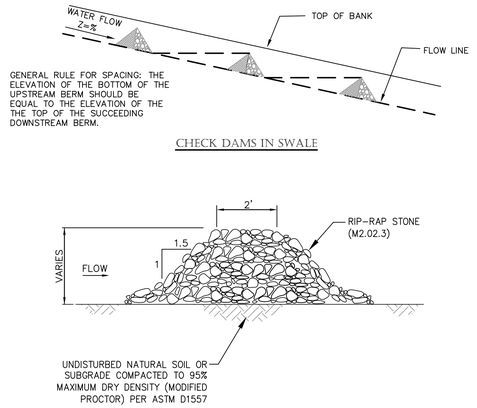
ISOMETRIC VIEW

BERM

STAPLES

NOTES:
[1] USE AS NEEDED TO STABILIZE 2:SLOPES IN EXCESS OF 3:1
[2] SLOPE SURFACE SHALL BE FREE OF ROCK, CLODS, STICKS AND GRASS, MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT
[3] APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS
[4] LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH
[5] MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE
[6] TAMP SOIL OVER MAT/BLANKET

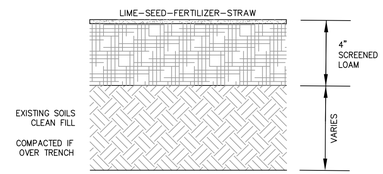
3 SLOPE EROSION CONTROL BLANKET SLOPE STABILIZATION
N.T.S.



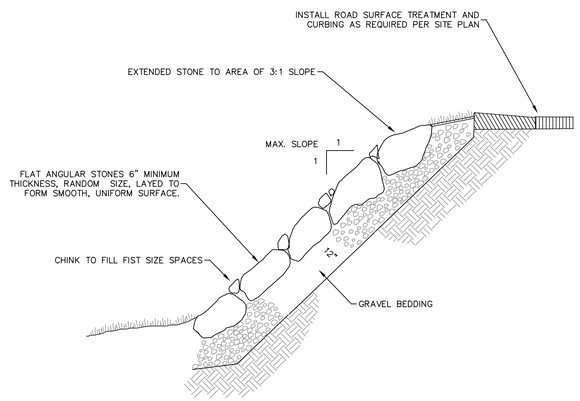
GENERAL RULE FOR SPACING: THE ELEVATION OF THE BOTTOM OF THE UPSTREAM BERM SHOULD BE EQUAL TO THE ELEVATION OF THE THE TOP OF THE SUCCEEDING DOWNSTREAM BERM.

CHECK DAMS IN SWALE

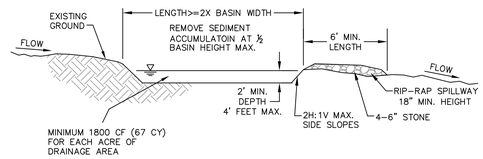
4 ROCK CHECK DAM
N.T.S.



5 LOAM & SEED
N.T.S.



6 RIP–RAP SLOPE STABILIZATION
N.T.S.



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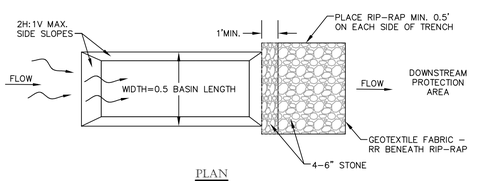

PLAN

7 TEMPORARY SEDIMENT BASIN
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RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS
PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE–1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D–SP.DWG
PLAN NO.	L–458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
EROSION CONTROL PLAN, NOTES & DETAILS
SHEET 2 OF 2

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C–6.12

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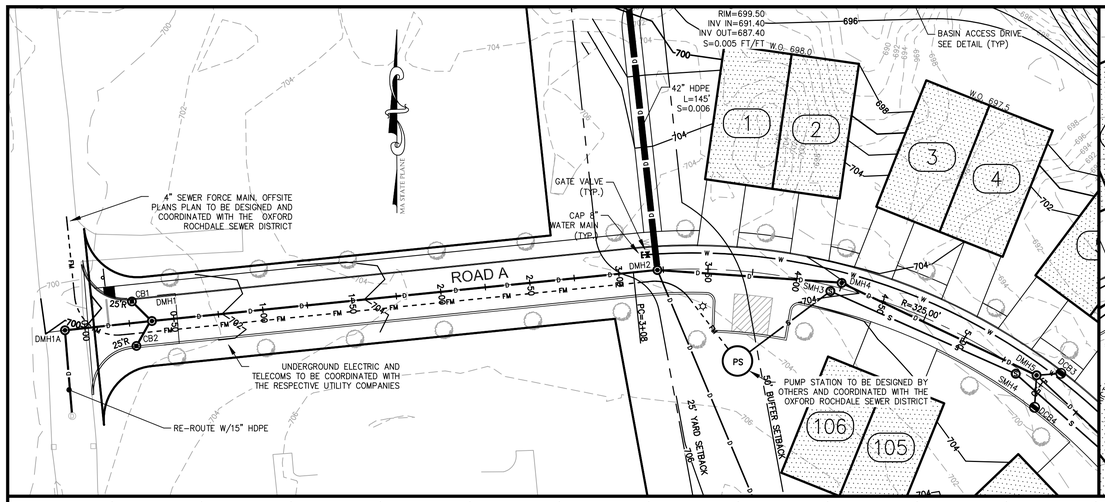

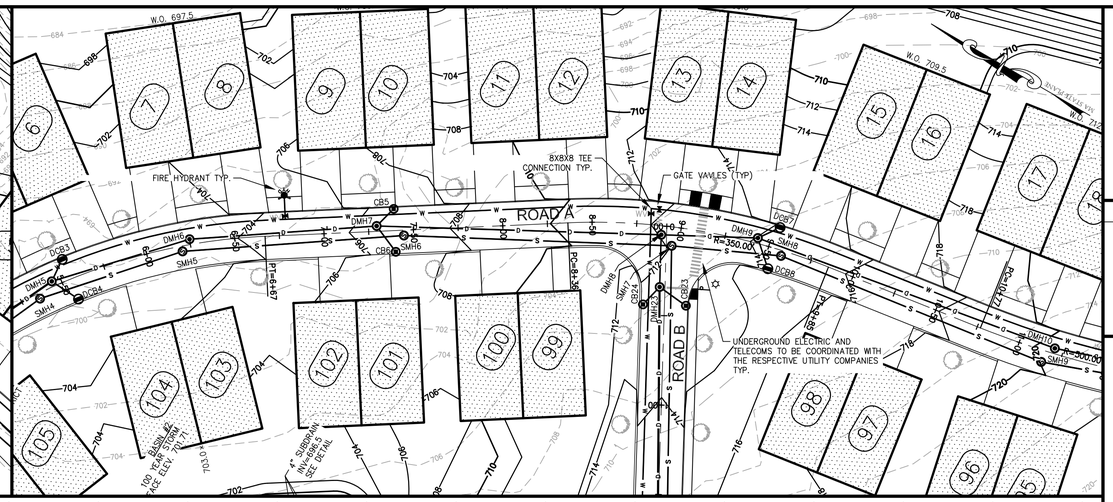

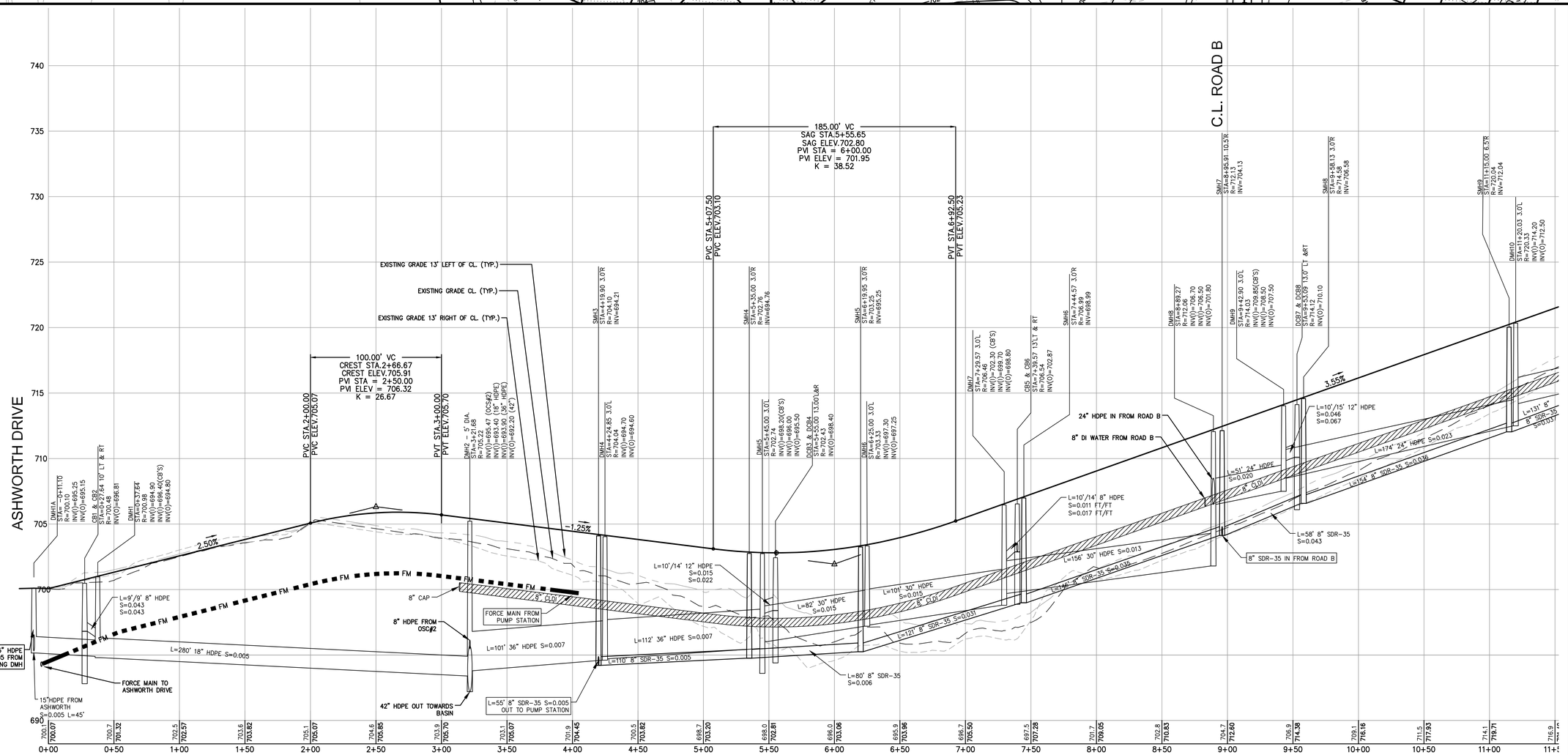

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ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD

OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

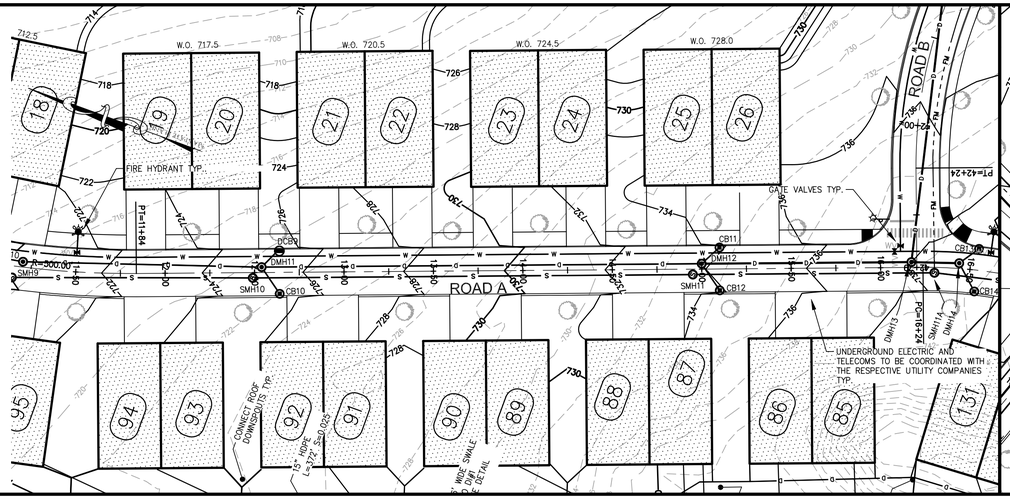
SHEET TITLE

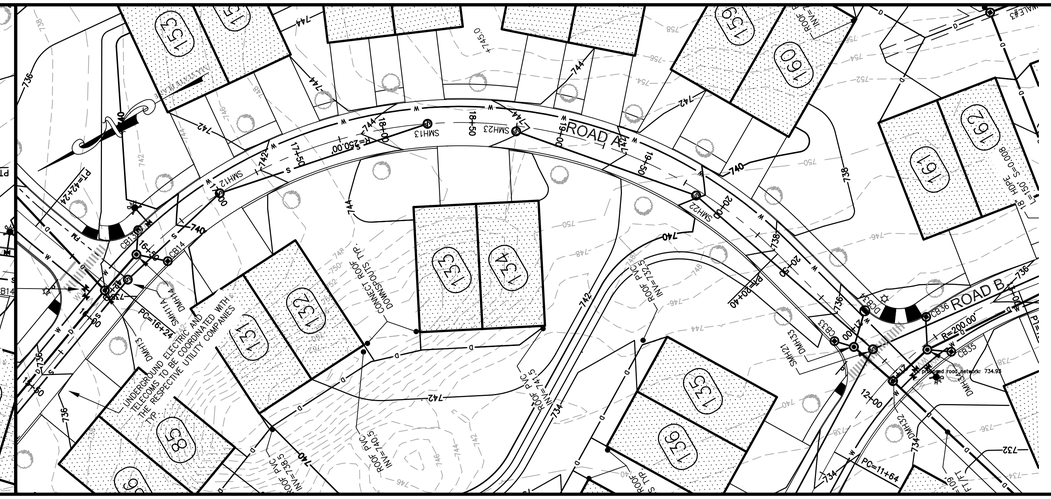
ROAD A
UTILITY PLAN &
ROAD PROFILE
STA. 0+00 TO 11+00

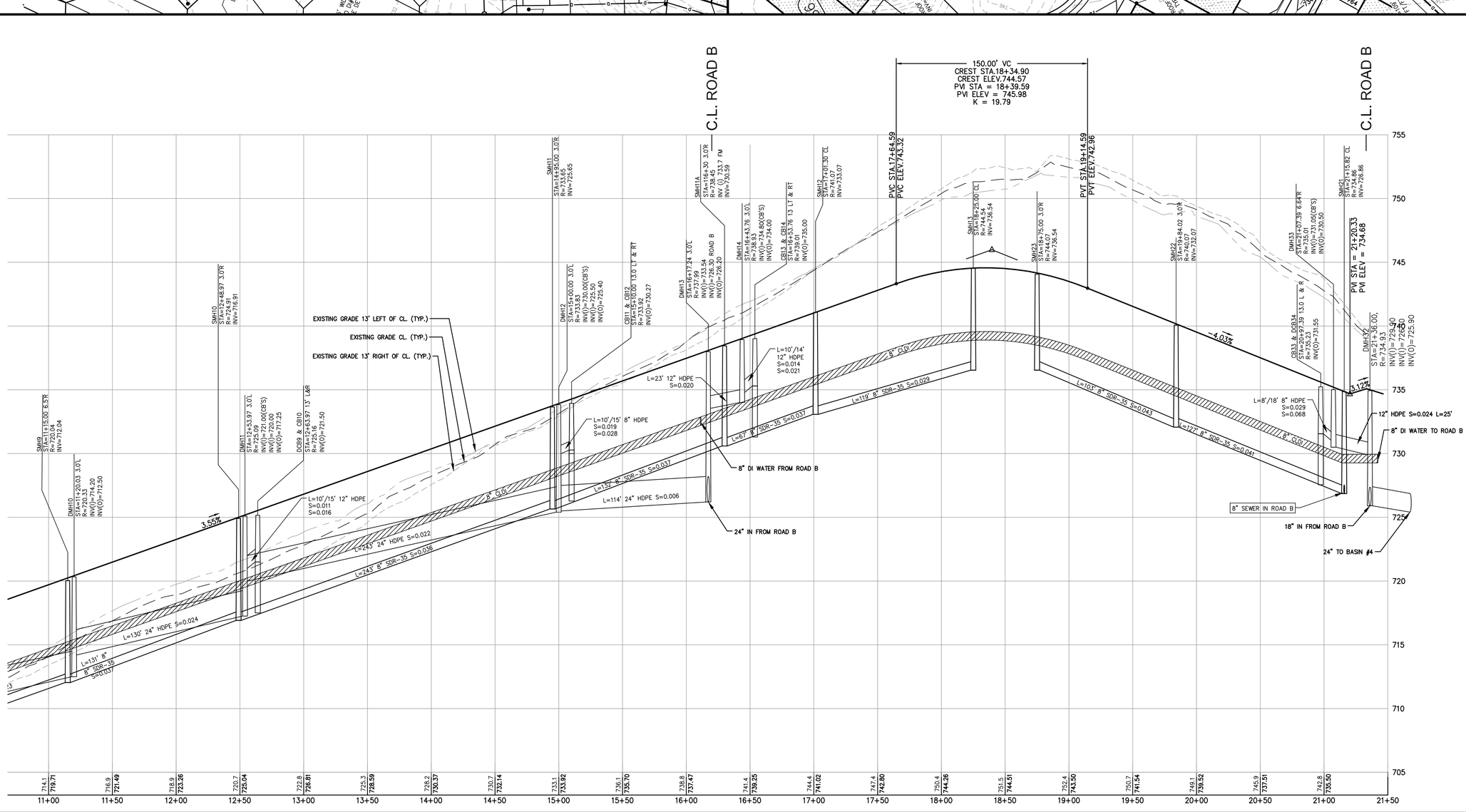
SHEET 1 OF 15

SHEET NO.

C-7.1







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DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

SHEET TITLE

ROAD A
UTILITY PLAN &
ROAD PROFILE
STA. 11+00 TO 21+50
SHEET 2 OF 15

SHEET NO.

C-7.2

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP-PROFILE SHEET PLOTTING-REV0.DWG 11-18-24 1:45:04 PM - LAYOUT C7.2

ROAD A
ROAD B
C.L. ROAD A
EXISTING GRADE 13' LEFT OF CL. (TYP.)
EXISTING GRADE CL. (TYP.)
EXISTING GRADE 13' RIGHT OF CL. (TYP.)
PVI STA = 0+13.05
PVI ELEV = 711.95
PVC STA=5+66.40
PVC ELEV.725.66
PVI STA = 6+16.40
PVI ELEV = 726.90
K = 89.08
100.00' VC
PVT STA=6+66.40
PVT ELEV.727.58
2.48%
-2.61%
1.36%
L=179' 24" HDPE S=0.024
L=196' 8" SDR-35 S=0.024
L=26' 24" HDPE S=0.012
L=14'/9' 8" HDPE S=0.008 S=0.011
8" SDR 35 ROAD A
24" HDPE ROAD A
8" CLDI ROAD A
L=70' 8" SDR-35 S=0.027
L=73' 24" HDPE S=0.019
L=104' 24" HDPE S=0.007
L=106' 8" SDR-35 S=0.022
L=86' 8" SDR-35 S=0.013
18" HDPE IN FROM YARD DRAIN
L=14'/10' 8" HDPE S=0.021 S=0.015
L=15'/10' 12" HDPE S=0.027 S=0.018
L=93' 15" HDPE S=0.023
L=235' 15" HDPE S=0.019
L=237' 8" SDR-35 S=0.019
L=12'/13' 12" HDPE S=0.033 S=0.034
L=171' 12" HDPE S=0.014
L=76' 12" HDPE S=0.011
L=177' 8" SDR-35 S=0.014
L=77' 8" SDR-35 S=0.015
L=228' 8"
8" HDPE L=10'/14' S=0.032 S=0.020
DMH8 STA=0+04.88 3.0'R R=712.06 INV(I)=706.70 INV(O)=701.75
DMH23 STA=0+34.08 3.0'R R=712.38 INV(I)=708.00(CB'S) INV(O)=703.05
CB23 & CB24 STA=0+44.08 13.0'L&R R=712.52 INV(O)=708.20
SMH7 STA=0+10.85 3.0'L R=712.13 INV=704.13
DMH24 STA=2+16.56 3.0'R R=716.90 INV(I)=711.80 INV(O)=711.30
SMH14 STA=2+11.46 3.0'L R=716.77 INV=708.77
DMH25 STA=2+92.07 3.0'R R=717.27 INV(I)=714.50(CB'S) INV(O)=713.00 INV(O)=712.90
CB25 & CB26 STA=3+01.65 13.0'L & 13.0'R R=718.73 INV(O)=714.70
DMH26 STA=3+09.42 3.0'R R=721.43 INV(I)=717.15 INV(O)=713.80 18" FROM YARD DRAIN INV(O)=713.70
SMH15 STA=2+87.07 3.0'L R=718.65 INV=710.65
SMH16 STA=3+80.75 6.5'L R=720.86 INV=711.79
SMH17 STA=4+50.80 3.0'L R=722.53 INV=715.69 INV OUT =714.12
DMH27 STA=4+95.80 3.0'R R=723.82 INV(I)=719.50(CB'S) INV(O)=719.25
DCB27 & CB28 STA=5+05.80 13.0' LT & RT R=723.79 INV(O)=719.90
SMH18 STA=7+29.80 6.5'L R=728.23 INV=720.23
DMH28 STA=7+34.62 CL R=728.33 INV(I)=724.10(CB'S) INV(O)=723.95 INV(O)=723.85
CB29 & CB30 STA=7+45.50 13.0'LT & RT R=728.27 INV(O)=724.20
SMH19 STA=8+92.47 3.0'L R=730.78 INV=722.78
DMH29 STA=9+19.47 3.0'R R=730.35 INV(I)=726.50 INV(O)=726.40
SMH20 STA=9+92.54 3.0'L R=731.90 INV=723.90
DMH30 STA=9+97.64 4'R R=731.94 INV(I)=727.60(CB'S) INV(O)=727.45
CB31 AND CB32 STA=10+07.64 13.0' LBR R=731.83 INV(O)=728.05
ROAD A STA=0+00
ROAD B STA=0+00
ROAD B STA=9+00
ROAD B STA=11+00
PC=8+36
PT=9+85
PC=1+81
PT=3+89
PC=5+60
PT=6+73
PC=1+50
PT=2+69
R=175.00
R=150.00
R=150.00
R=175.00
SMH4
SMH5
SMH10
SMH11
SMH12
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UNDERGROUND ELECTRIC AND TELECOMS TO BE COORDINATED WITH RESPECTIVE UTILITY COMPANIES TYP.
GATE VALVES (TYP)
8x8x8 TEE CONNECTION TYP.
FIRE HYDRANT TYP.
YARD DRAIN TOP= RIM= 728.0 INV= 725.0
ROOF PVC INV=728.5
CONNECT ROOF DOWNSPOUTS TYP.
5A STATE R.A.N.G.E.
TO 710.0 SEE DETAIL
SWALE #1
SWALE #2
SWALE #3
SWALE #4
SWALE #5
SWALE #6
SWALE #7
SWALE #8
SWALE #9
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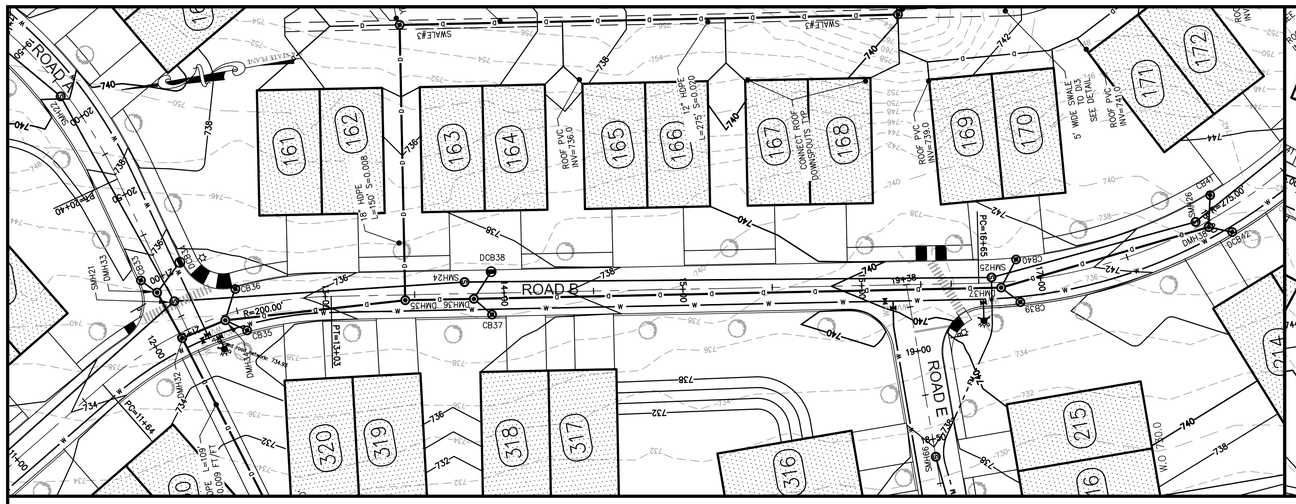
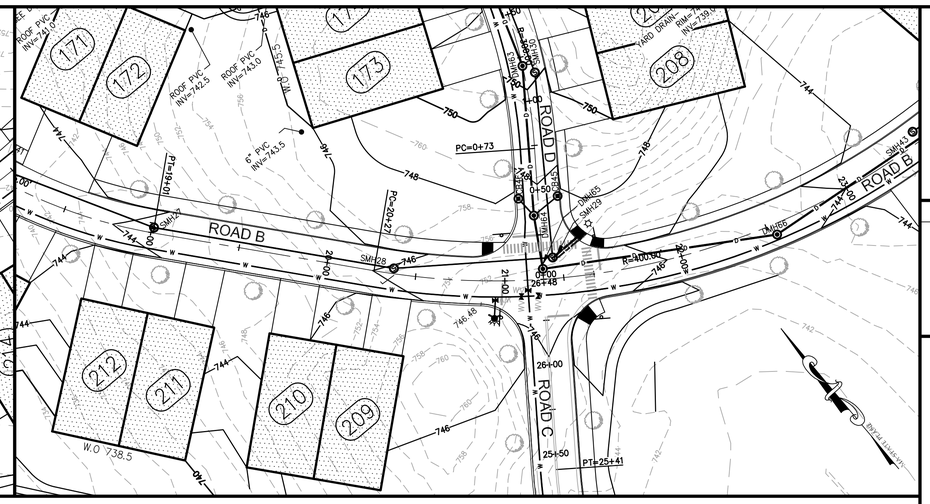
SWALE




ROAD B
ROAD D
ROAD C
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DMH65
SMH43
SMH65
SMH128
SMH129
ROOF PVC INV=742.5
ROOF PVC INV=743.5
AREA DRAIN INV=739.0
PC=0+73
PC=20+27
PT=20+40
PC=25+48
PT=25+41
R=400.00'
W.O 738.5
W.O 745.5
6" PVC INV=743.5
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6" PVC INV=294.0
6" PVC INV=293.0
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6" PVC INV=271.0
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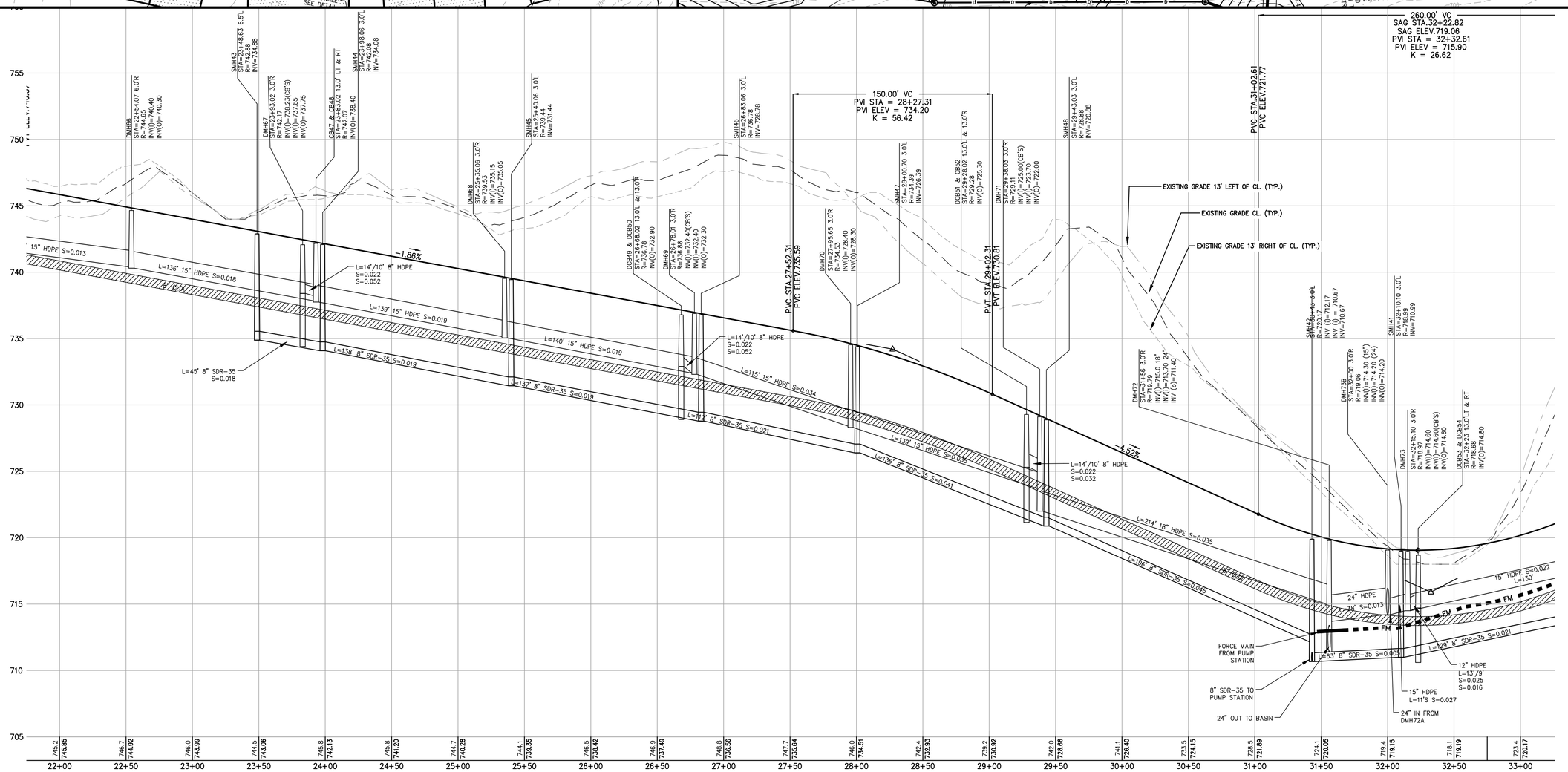

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COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
NO. 41717
REGISTERED PROFESSIONAL ENGINEER

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB,TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

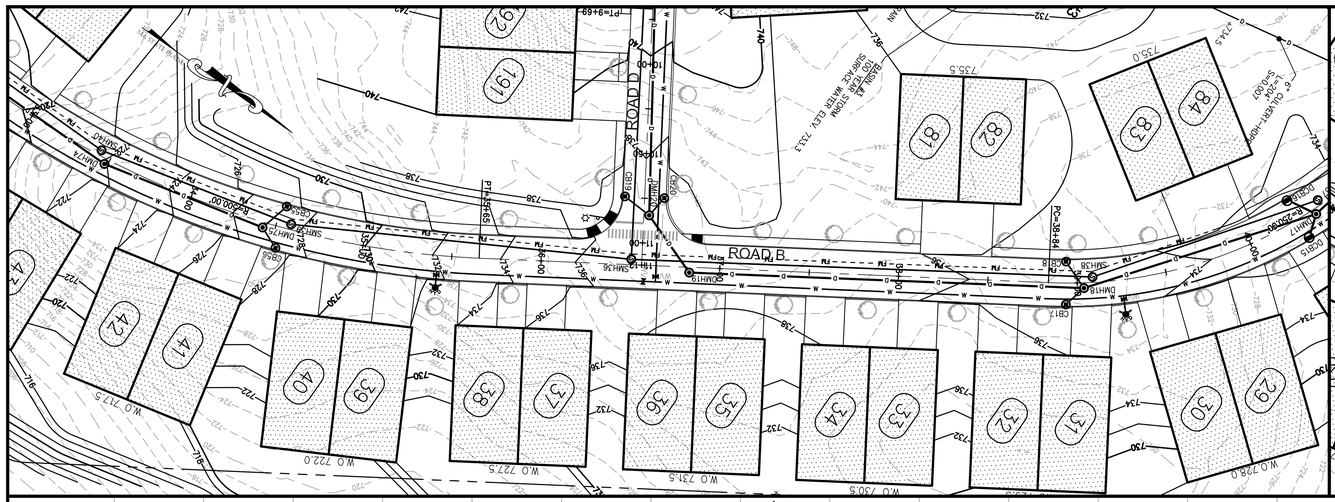
40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

SHEET TITLE

ROAD B
UTILITY PLAN &
ROAD PROFILE
STA. 22+00 TO 33+00
SHEET 5 OF 15

SHEET NO.

C-7.5



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APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

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OXFORD, MASSACHUSETTS

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REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB,TRB
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DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

SHEET TITLE

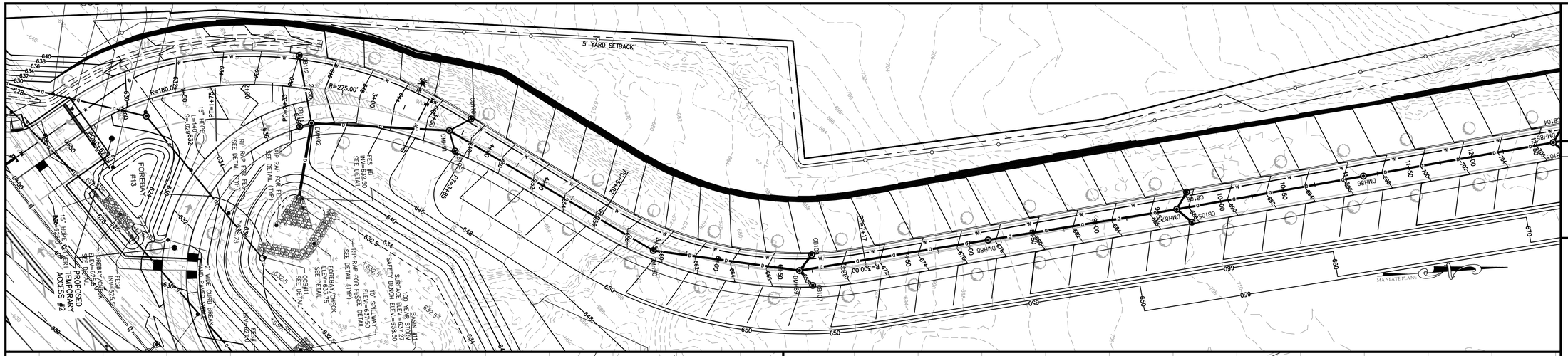
ROAD B
UTILITY PLAN &
ROAD PROFILE
STA. 33+00 TO 43+00

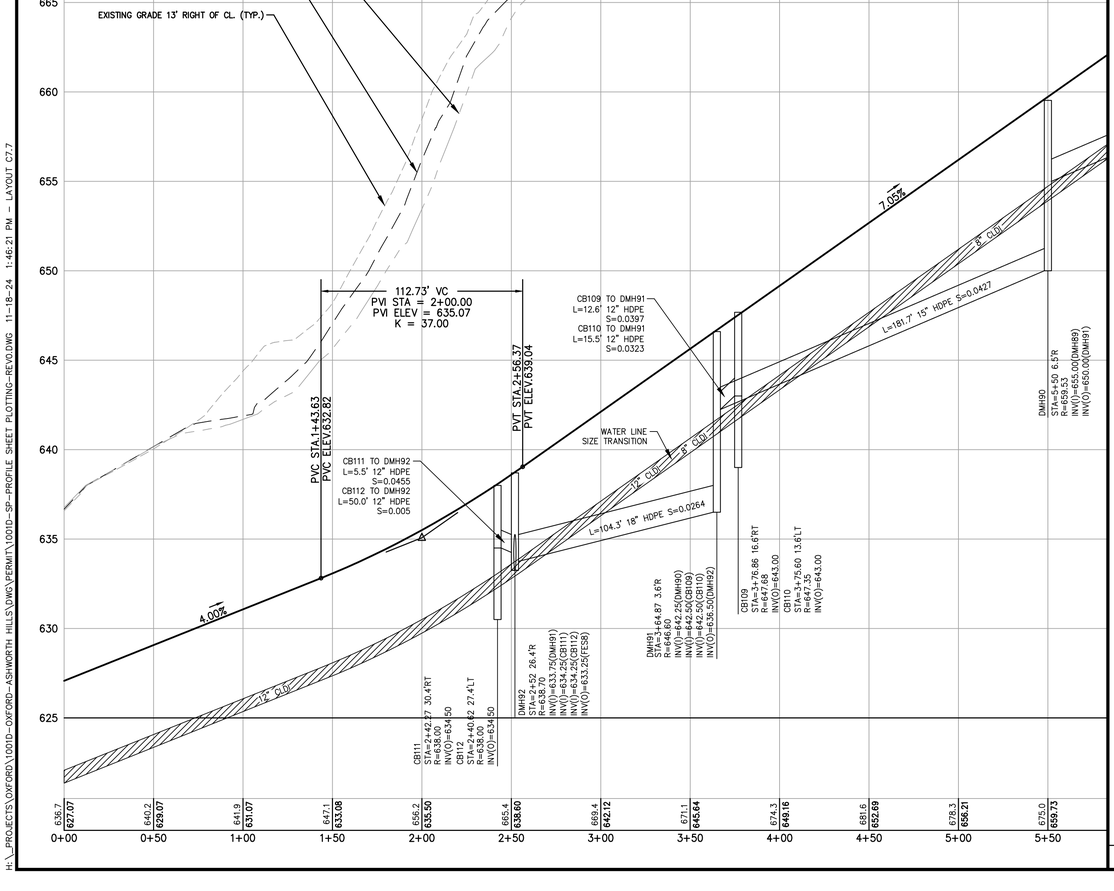
SHEET 6 OF 15

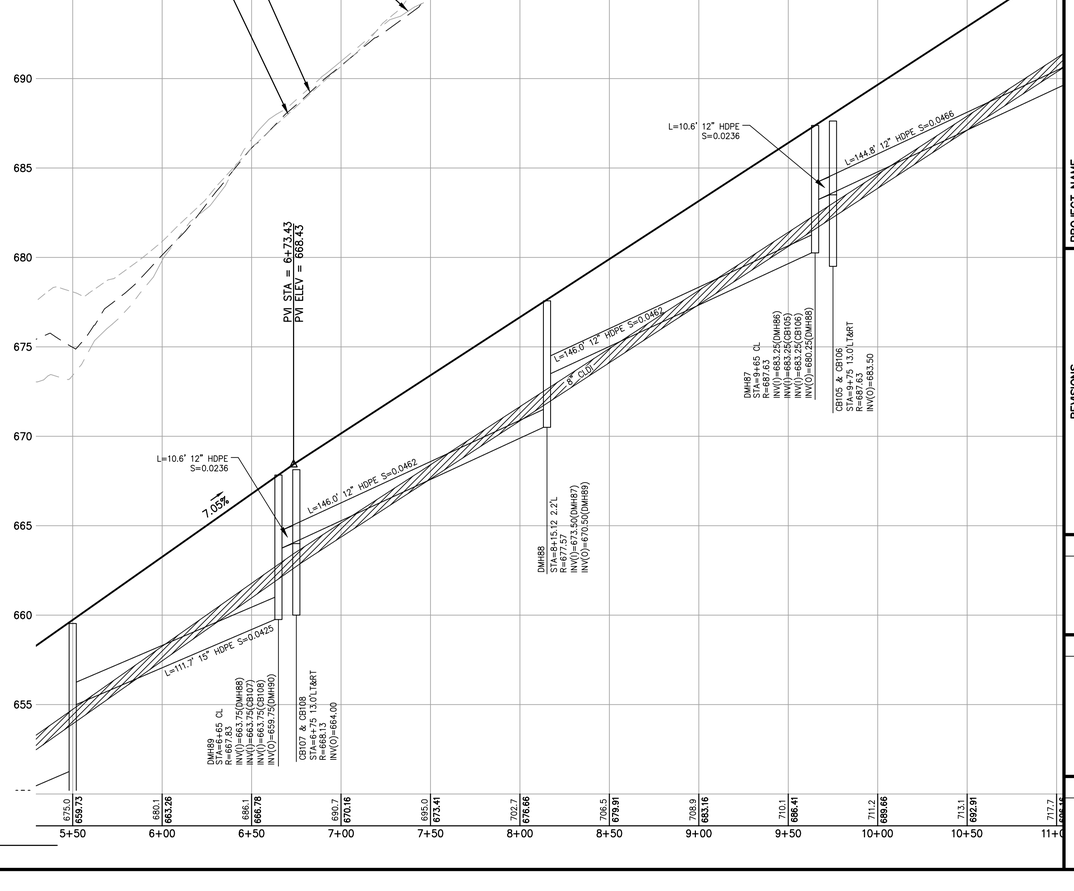
SHEET NO.

C-7.6

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP-PROFILE SHEET PLOTTING-REV0.DWG 11-18-24 1:46:01 PM - LAYOUT C7.6







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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD

OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB,TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

SHEET TITLE

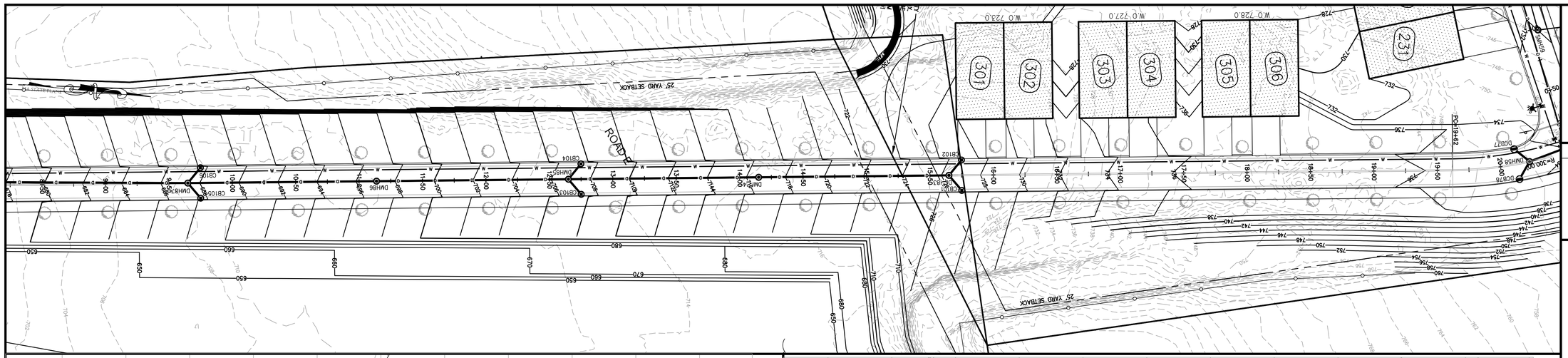
ROAD C
UTILITY PLAN &
ROAD PROFILE
STA. 0+00 TO 11+00

SHEET 7 OF 15

SHEET NO.

C-7.7

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D_SP-PROFILE SHEET PLOTTING-REVO.DWG 11-18-24 1:46:21 PM - LAYOUT C7.7


ROAD C
25' YARD SETBACK
301
302
303
304
305
306
231
W.O 723.0
W.O 727.0
W.O 728.0
DMH86
DMH85
DMH84
DMH83
CB104
CB103
CB102
CB101
DCG77
DCG76
DMH58
DMH82
DMH81
CB105
CB106
DMH87
DMH88
DMH89
DMH90
DMH91
DMH92
DMH93
DMH94
DMH95
DMH96
DMH97
DMH98
DMH99
DMH100
DMH101
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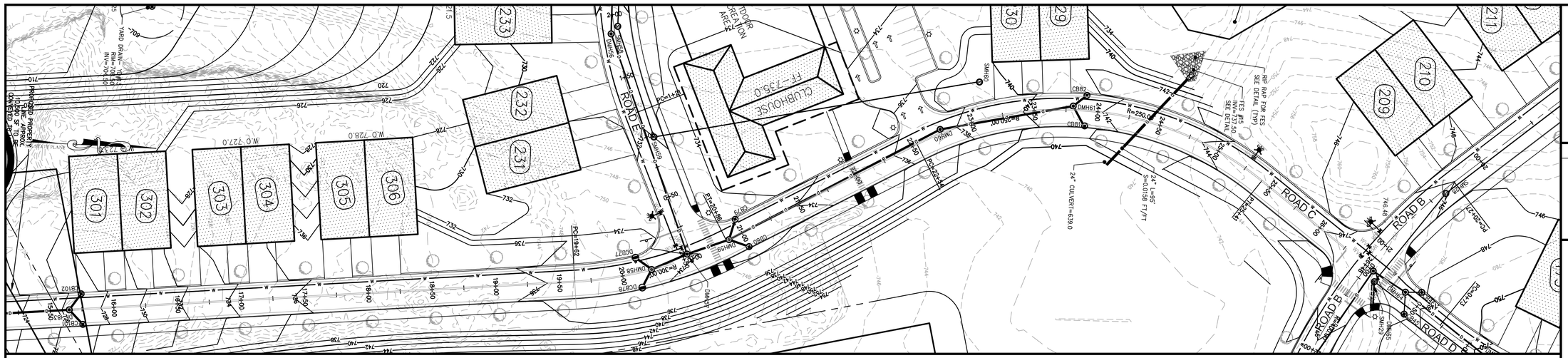
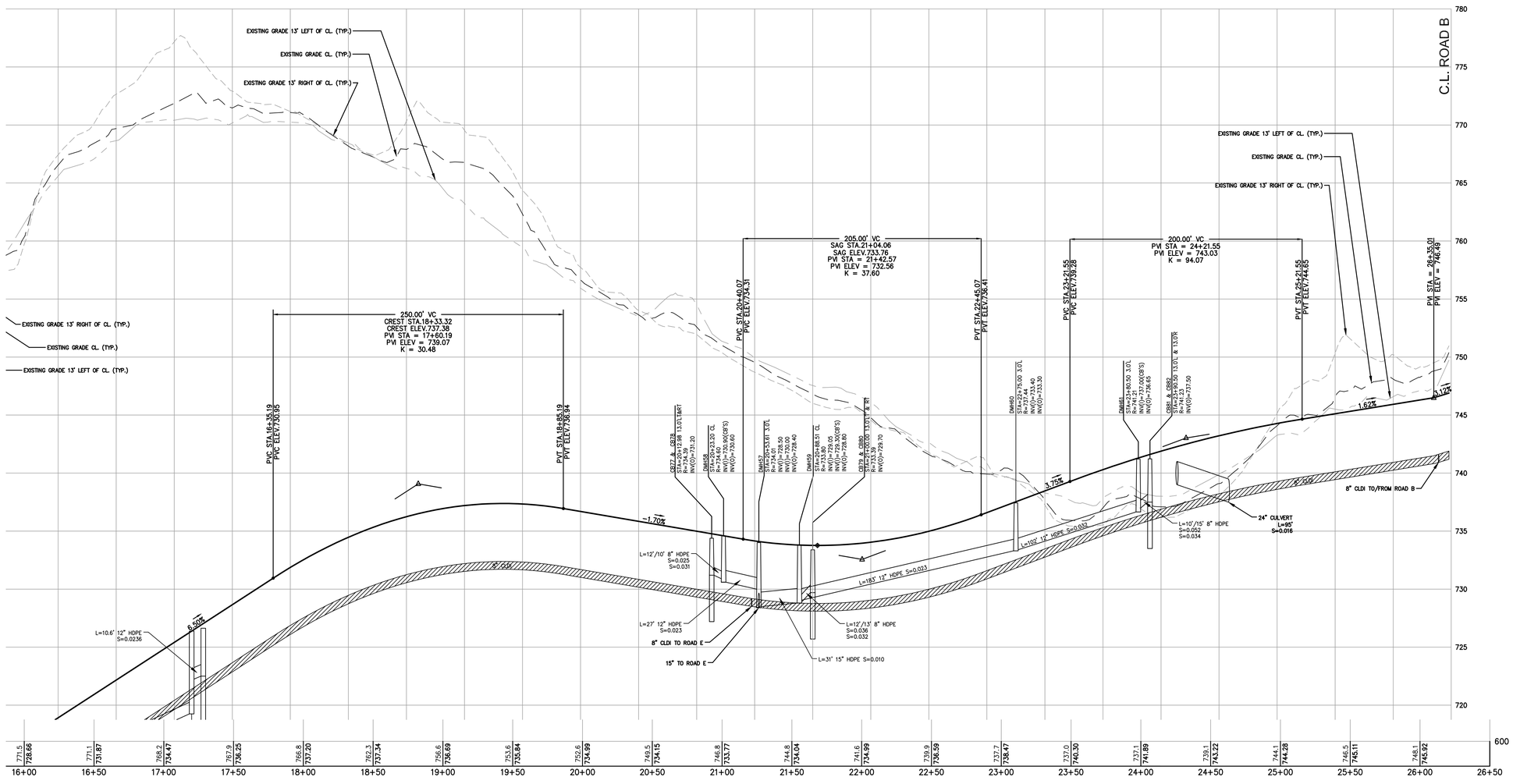
DMH125
DMH126





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JAMES A. BERNARDINO
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REGISTERED PROFESSIONAL ENGINEER

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD

OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB,TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

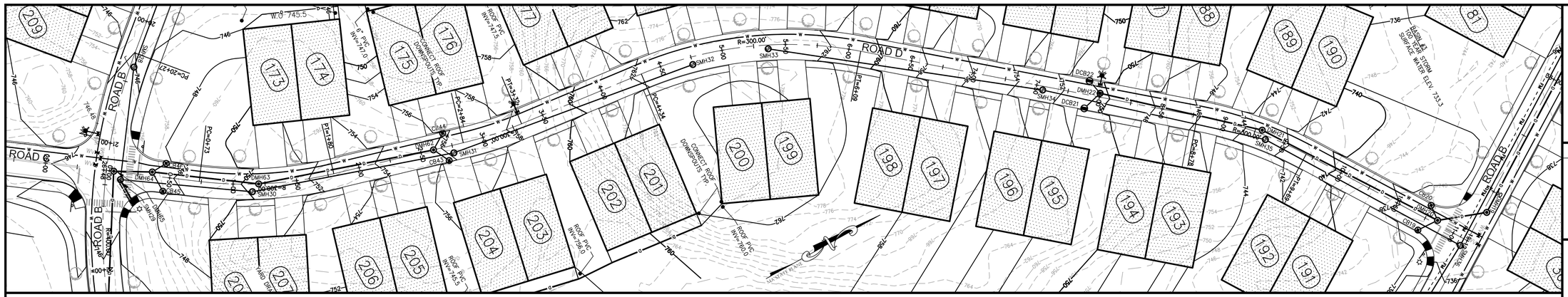
SHEET TITLE

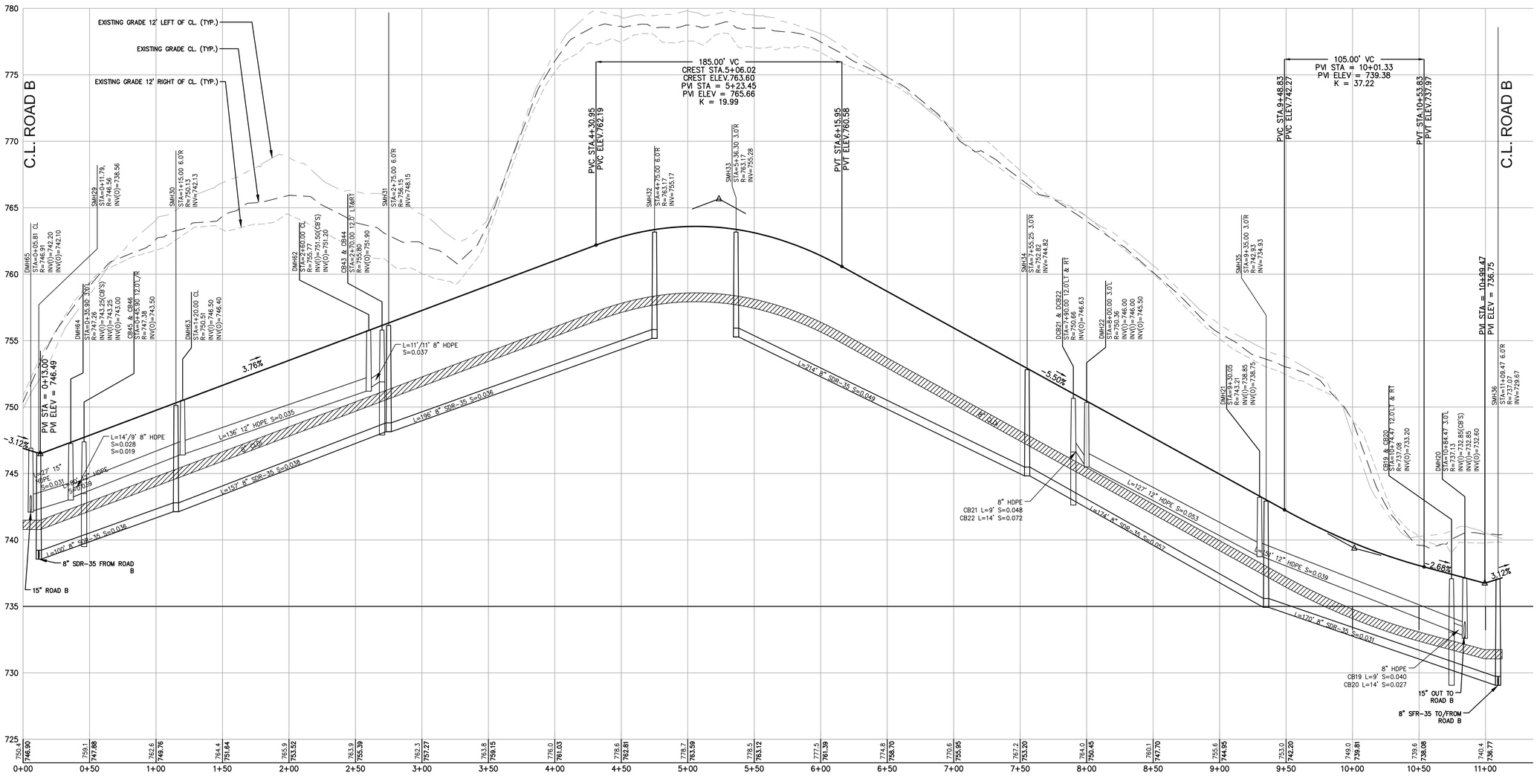
ROAD C
UTILITY PLAN &
ROAD PROFILE
STA. 16+00 TO 26+50

SHEET 9 OF 15

SHEET NO.

C-7.9





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ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD

OXFORD, MASSACHUSETTS

PREPARED FOR

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997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB,TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

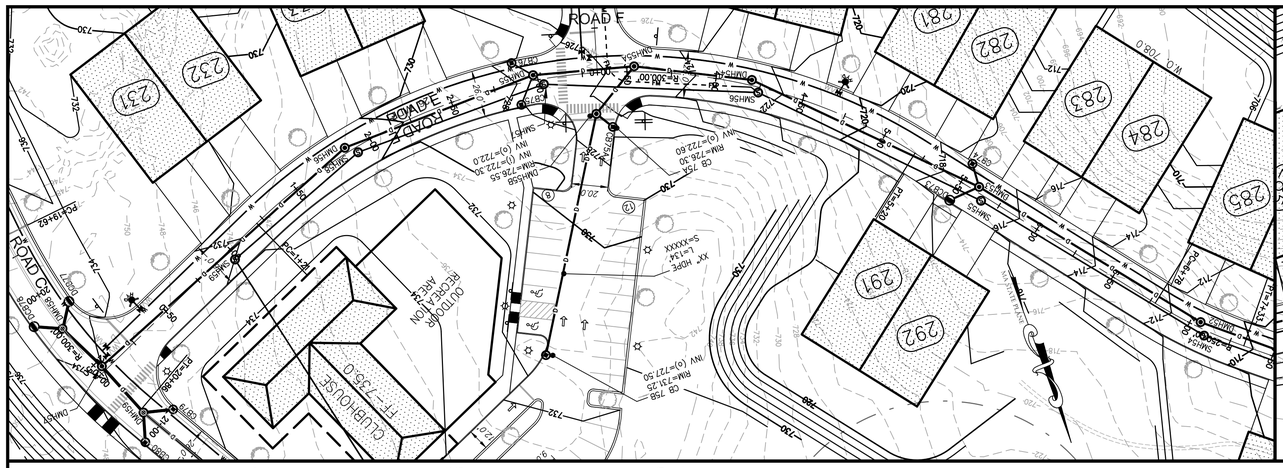
40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

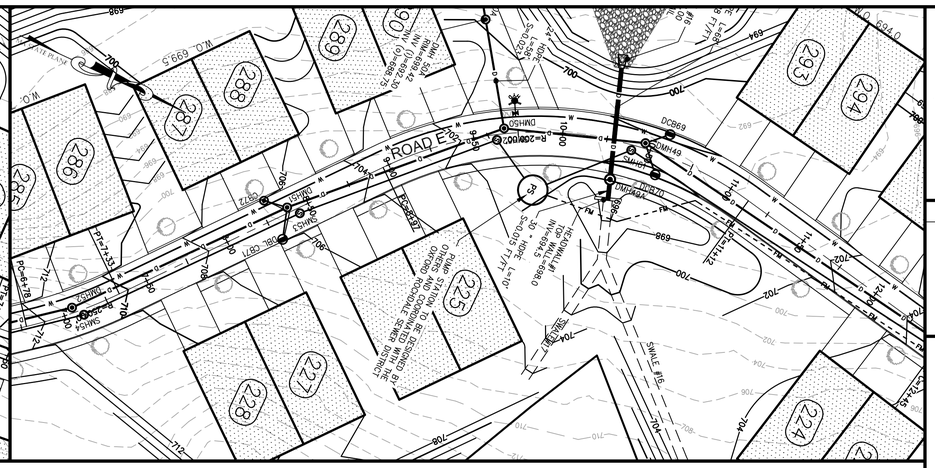
SHEET TITLE

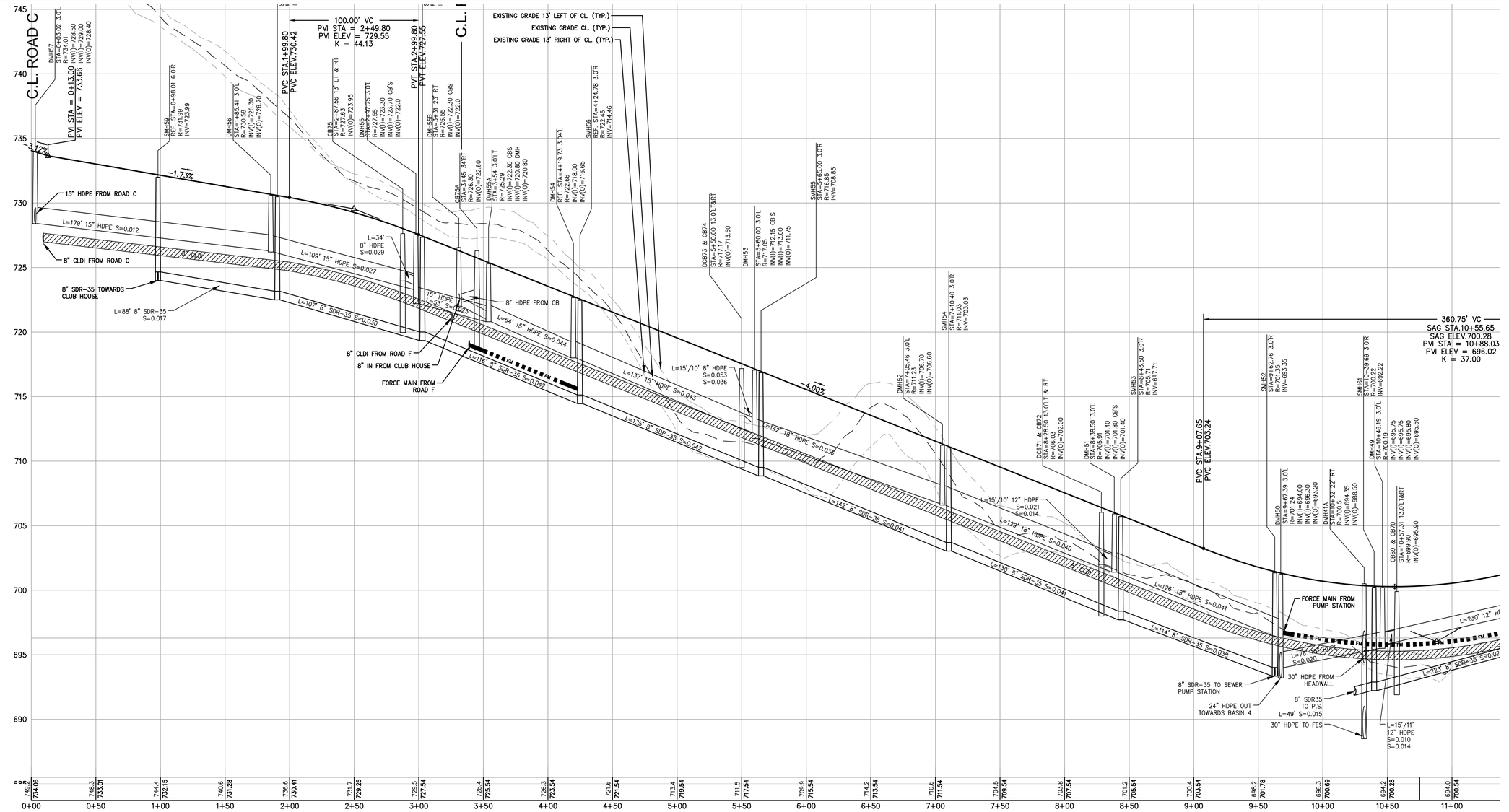
ROAD D
UTILITY PLAN &
ROAD PROFILE
STA. 0+00 TO 11+00
SHEET 10 OF 15

SHEET NO.

C-7.10







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OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR
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Worcester, MA 01607

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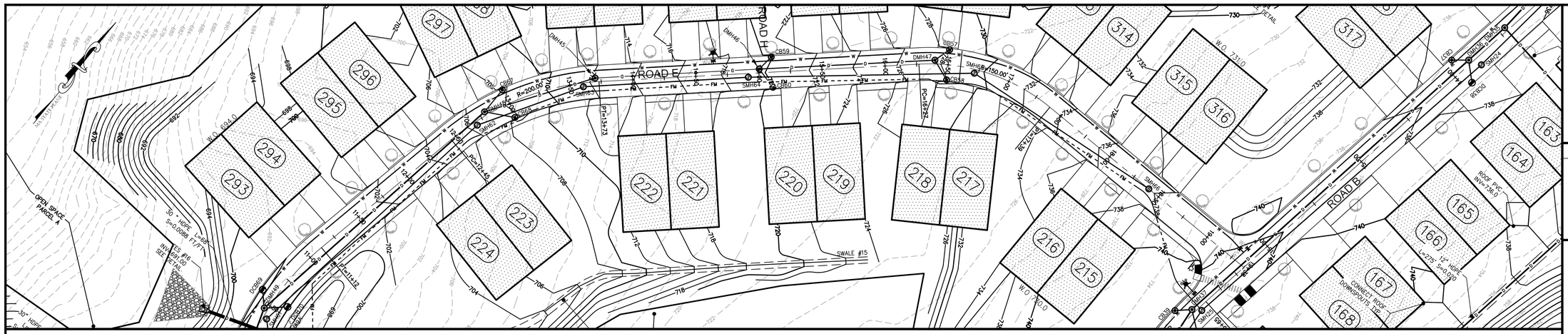
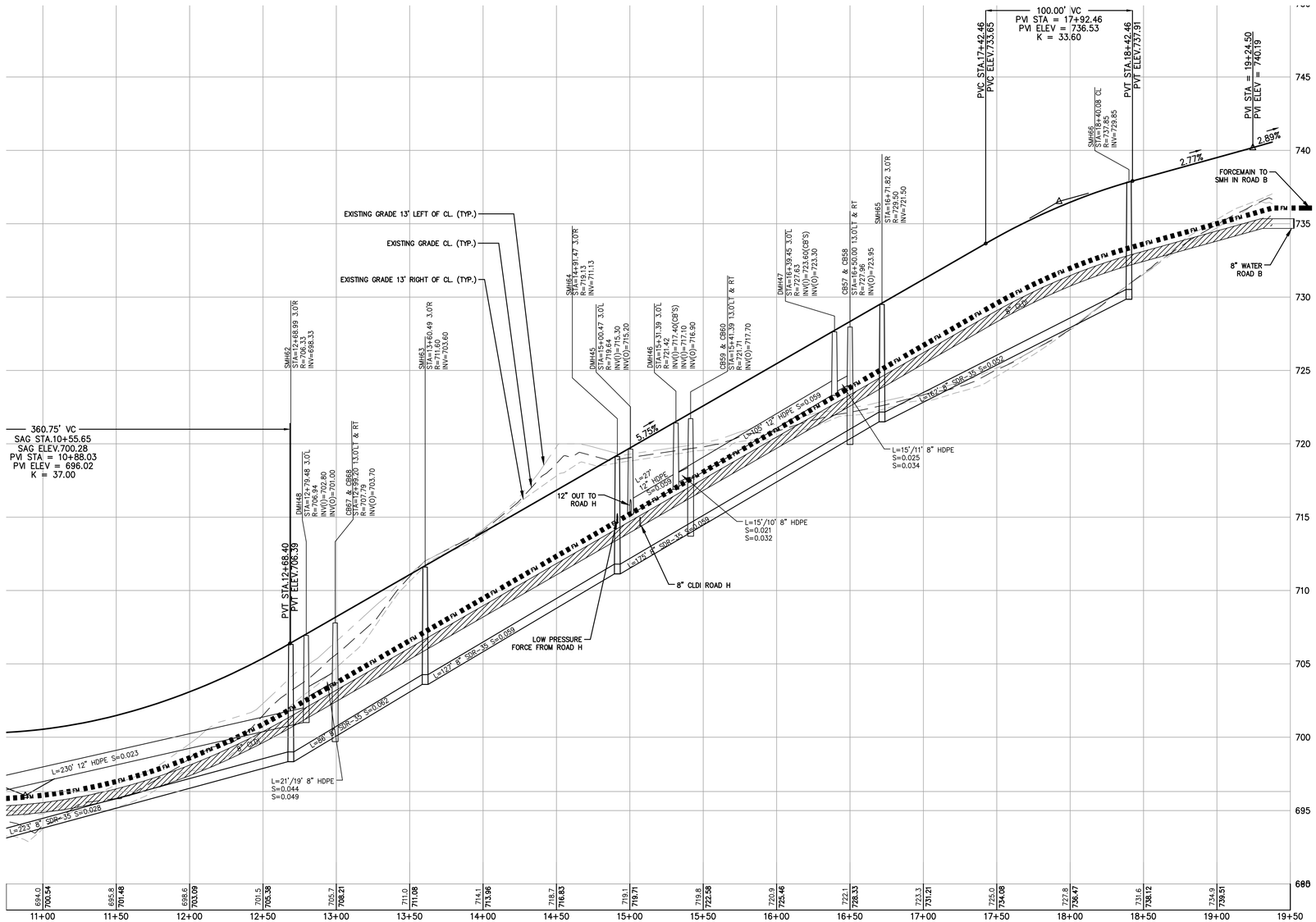
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

SHEET TITLE
ROAD E
UTILITY PLAN &
ROAD PROFILE
STA. 0+00 TO 11+00
SHEET 11 OF 15

SHEET NO.
C-7.11





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PLAN NO.	L-458

GRAPHIC SCALE

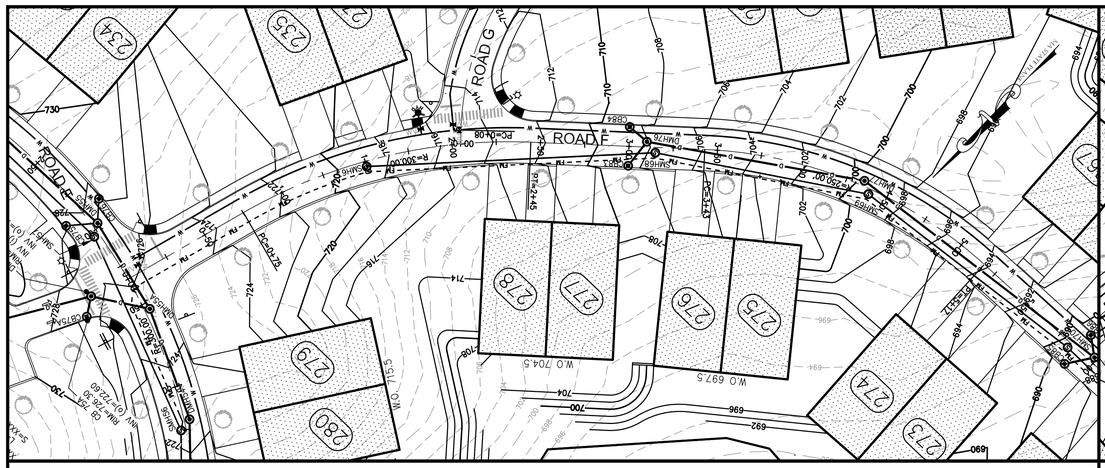
40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

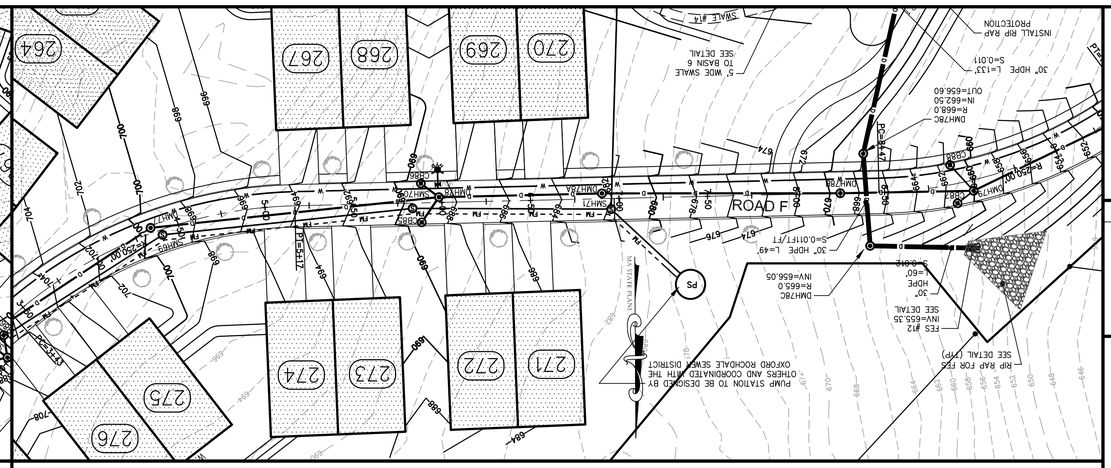
SHEET TITLE

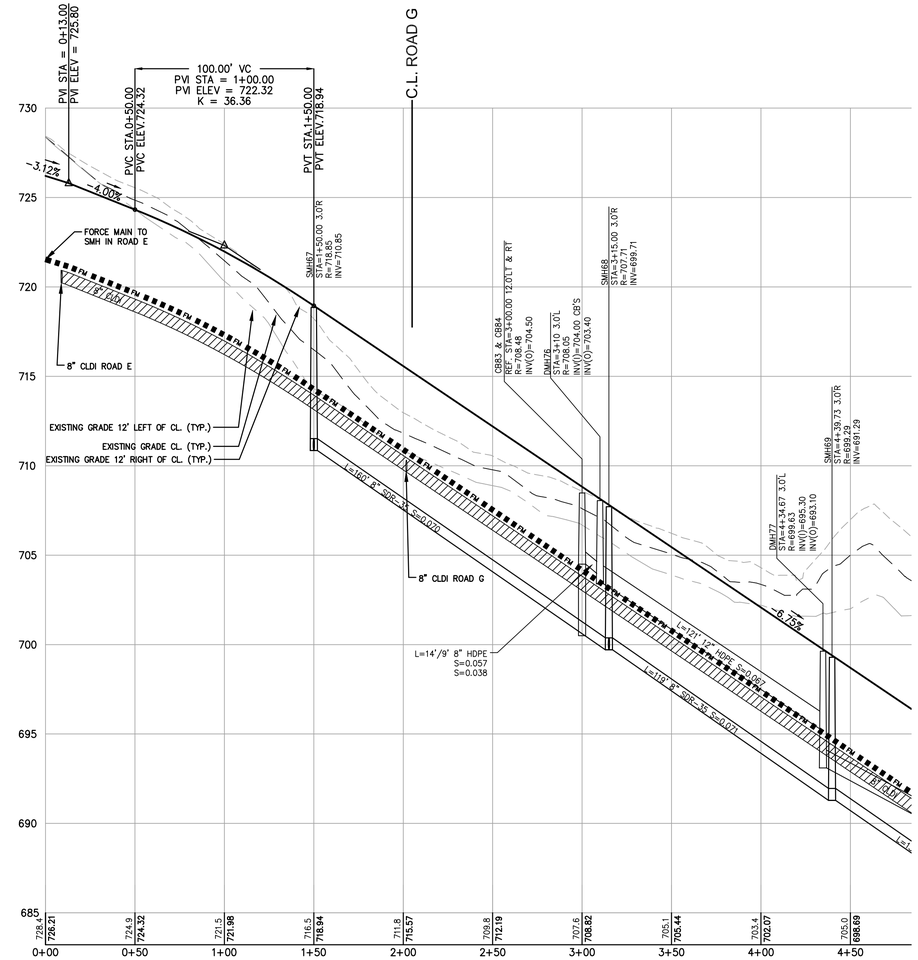
ROAD E
UTILITY PLAN &
ROAD PROFILE
STA. 11+00 TO 19+50
SHEET 12 OF 15

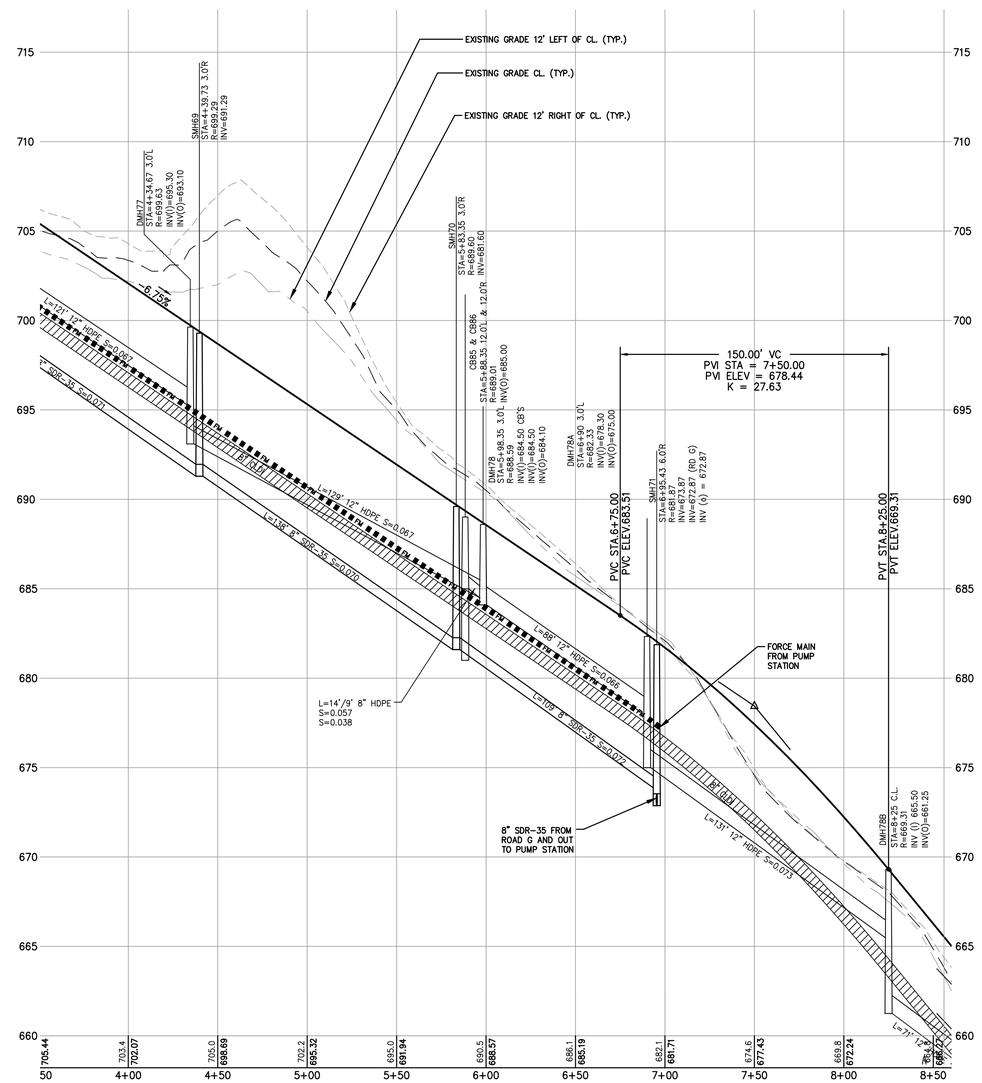
SHEET NO.

C-7.12









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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB,TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

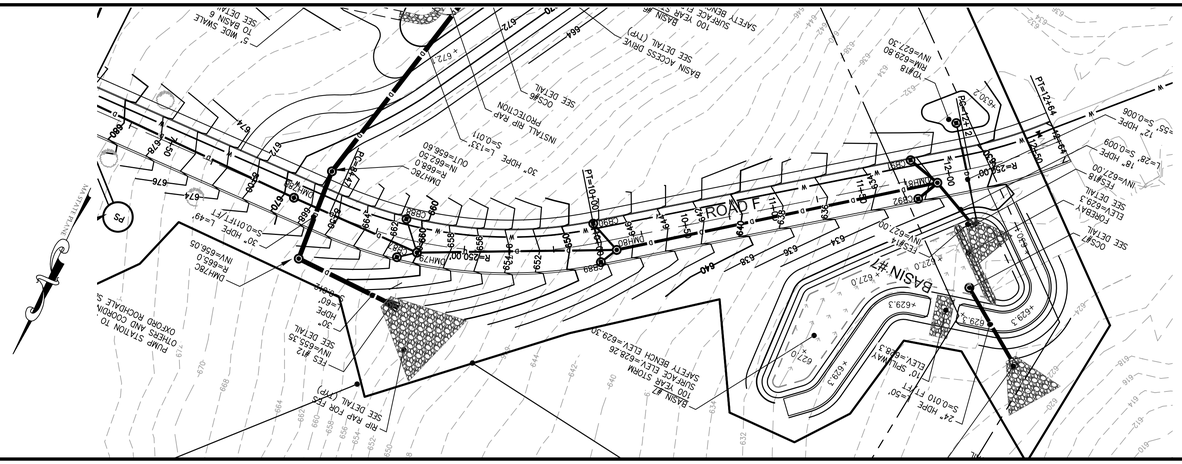
SHEET TITLE

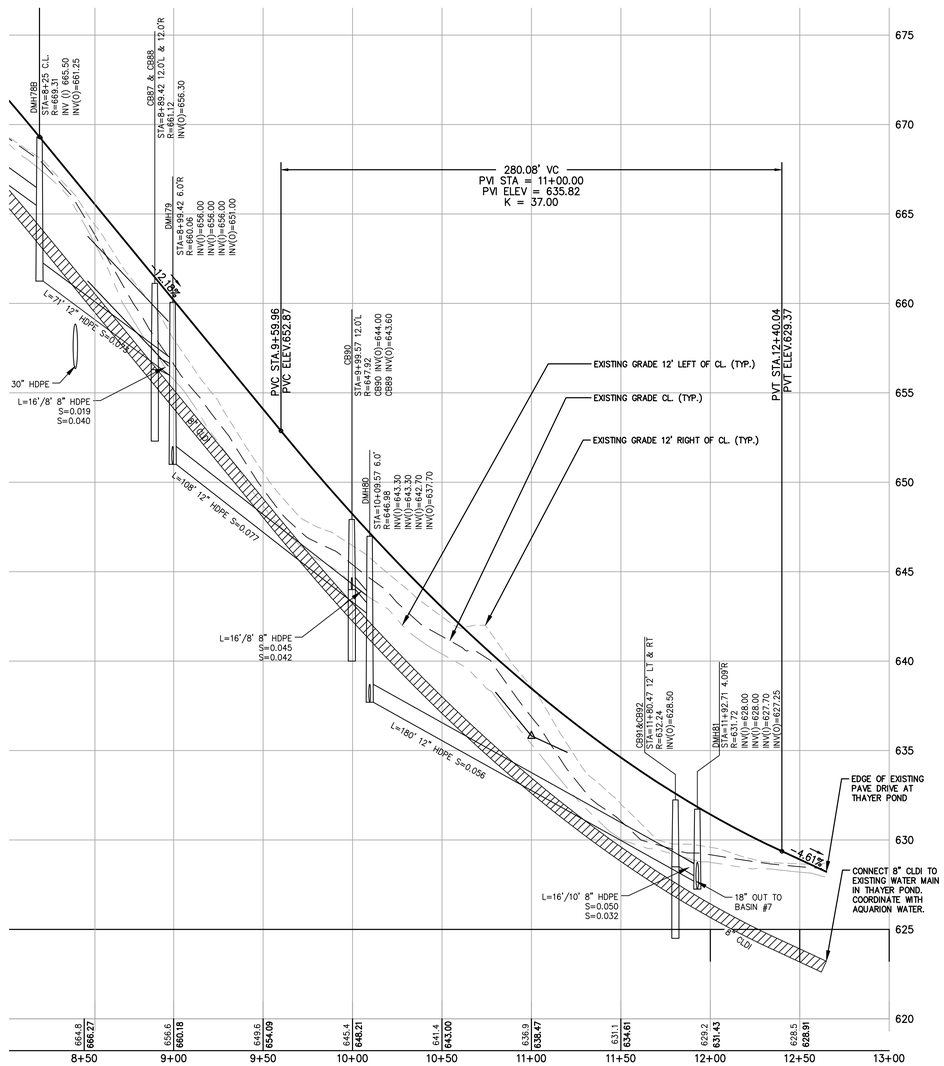
ROAD F
UTILITY PLAN &
ROAD PROFILE
STA. 0+00 TO 8+50

SHEET 13 OF 15

SHEET NO.

C-7.13





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RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

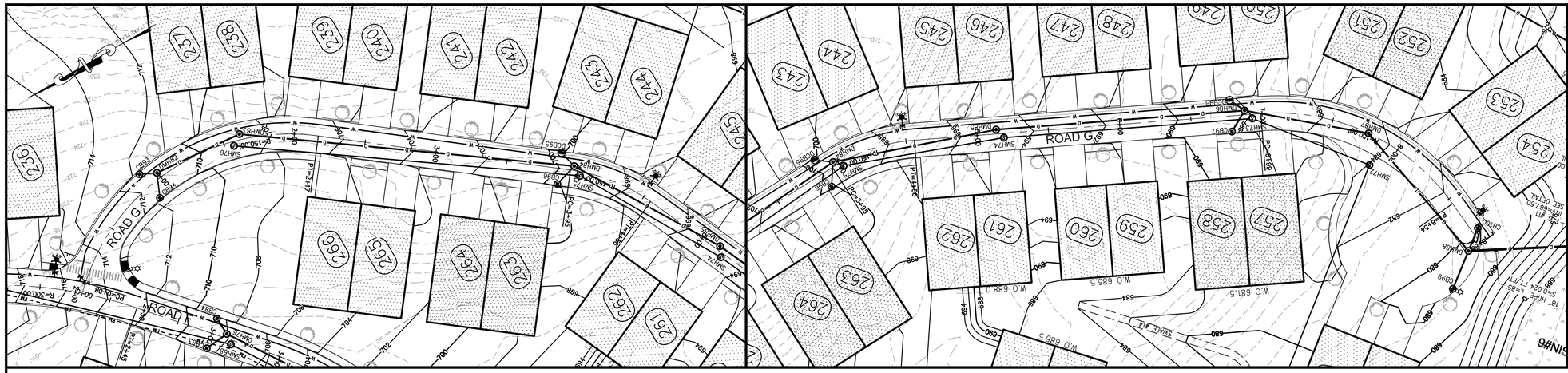
40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

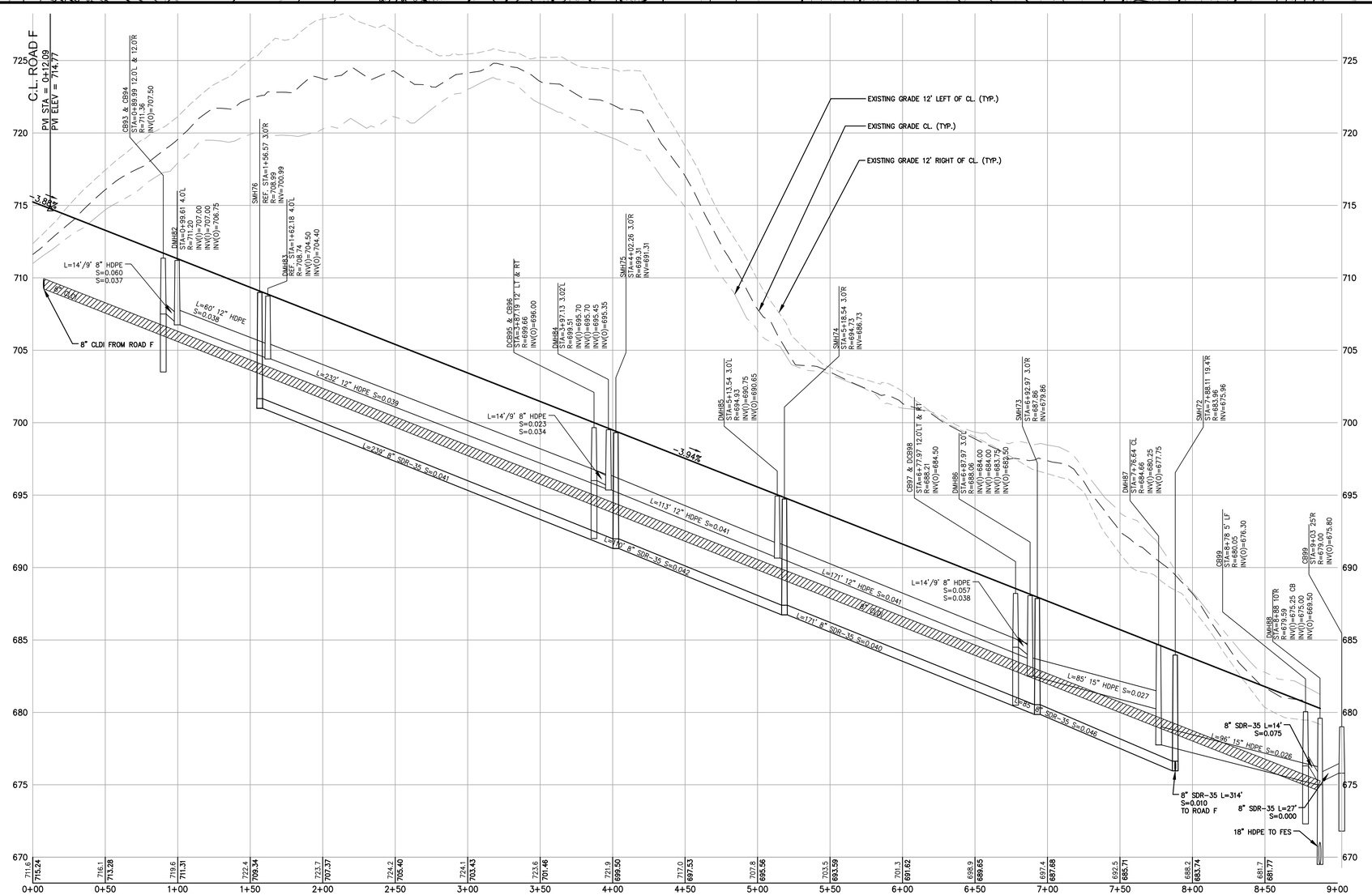
SHEET TITLE

ROAD F
UTILITY PLAN &
ROAD PROFILE
STA. 8+50 TO 13+00
SHEET 14 OF 15

SHEET NO.

C-7.14





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P.E.

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-10010
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\10010...\DWG\PERMIT\PROFILE.DWG
PLAN NO.	L-458

GRAPHIC SCALE

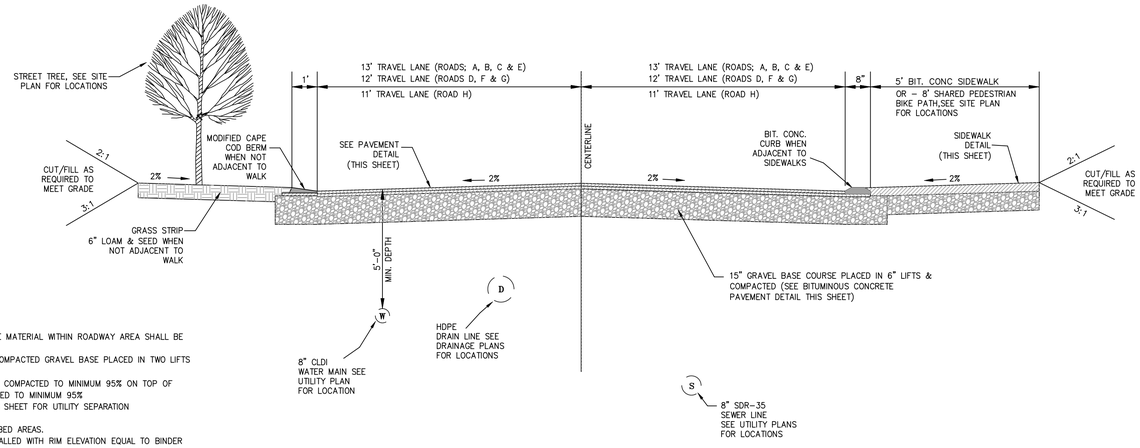
40 0 20 40 80
(IN FEET)
HORIZONTAL: 1 inch = 40 feet
VERTICAL: 1 inch = 4 feet

SHEET TITLE

ROAD G
UTILITY PLAN &
ROAD PROFILE
STA. 0+00 TO 9+00
SHEET 15 OF 15

SHEET NO.

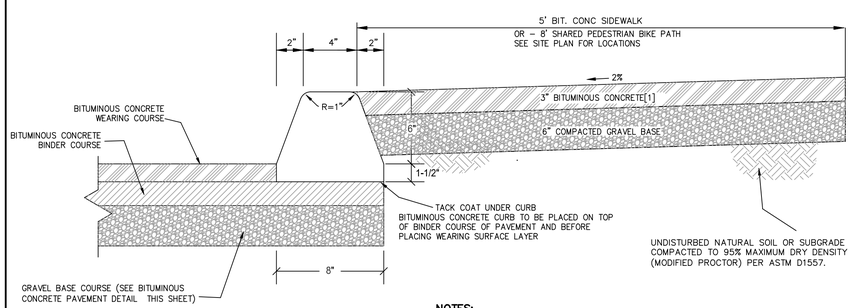
C-7.15



NOTES:

1. ALL UNSUITABLE SUBGRADE MATERIAL WITHIN ROADWAY AREA SHALL BE REMOVED.
2. GRAVEL BASE SHALL BE COMPACTED GRAVEL BASE PLACED IN TWO LIFTS CONSISTING OF:
   - 3/4" PROCESSED GRAVEL COMPACTED TO MINIMUM 95% ON TOP OF
   - GRADED GRAVEL COMPACTED TO MINIMUM 95%
3. REFER TO GENERAL NOTES SHEET FOR UTILITY SEPARATION REQUIREMENTS.
4. LOAM & SEED ALL DISTURBED AREAS.
5. CATCH BASINS TO BE INSTALLED WITH RIM ELEVATION EQUAL TO BINDER COURSE ELEVATION. CATCH BASIN RIM ELEVATIONS TO BE RAISED PRIOR TO TOP COURSE APPLICATION.

1 TYPICAL ROADWAY CROSS SECTION
N.T.S.



NOTES:

[1] MHD M3.11.03 CLASS I, TYPE I–1 BITUMINOUS CONCRETE (1–1/2" WEARING COURSE ON 1–1/2" BINDER COURSE). 1/2" MAXIMUM AGGREGATE OR PARTICLE SIZE. COMPACT TO TEST AVERAGE OF 95% NO TEST LOWER THAN 93%

[2] 8" GRAVEL BASE (1–½ MAX. STONE SIZE) COMPACTED TO 95% –MAXIMUM DRY DENSITY (MODIFIED PROCTOR) PER ASTM D1557

2 BITUMINOUS SIDEWALK AND PEDESTRAIN/BIKE SHARED PATH
N.T.S.

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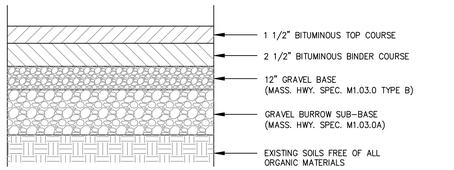
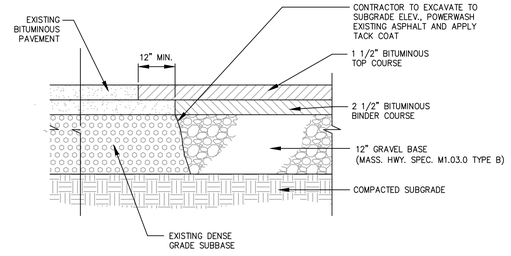
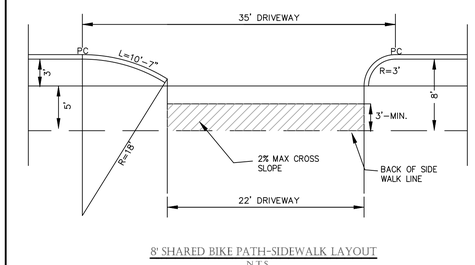


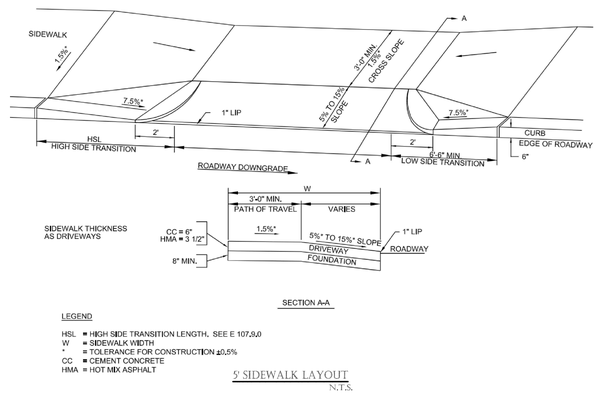
3 BITUMINOUS CONCRETE PAVEMENT (ROADWAY)
N.T.S.



4 PAVEMENT JOINTING
N.T.S.

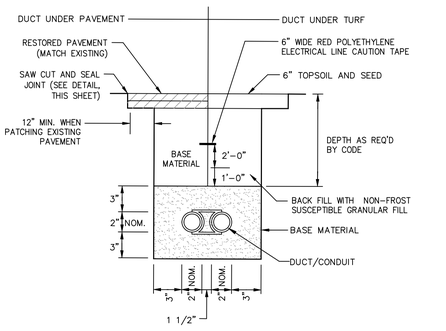


8' SHARED BIKE PATH-SIDEWALK LAYOUT
N.T.S.

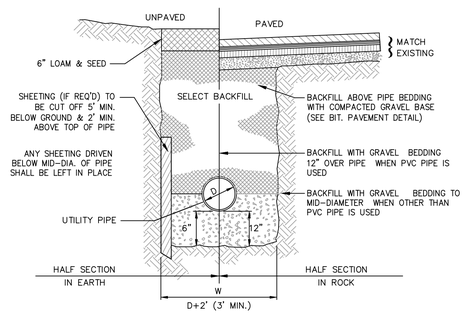


5' SIDEWALK LAYOUT
N.T.S.

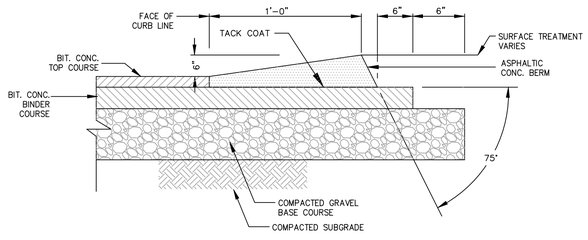
5 SIDEWALK THRU DRIVEWAYS WITH CURB RETURNS
N.T.S.



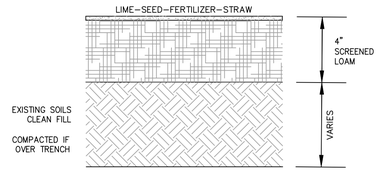
6 UNENCASED DUCT/CONDUIT
N.T.S.



7 TYPICAL UTILITY TRENCH
N.T.S.



8 MODIFIED ASPHALTIC CAPE COD BERM (CCB)
N.T.S.



9 LOAM & SEED
N.T.S.

PROJECT NAME

ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

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PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

CONSTRUCTION DETAILS

SHEET 1 OF 7

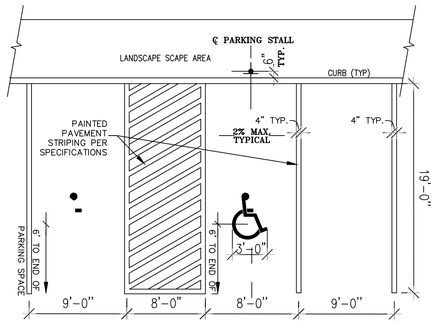
COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

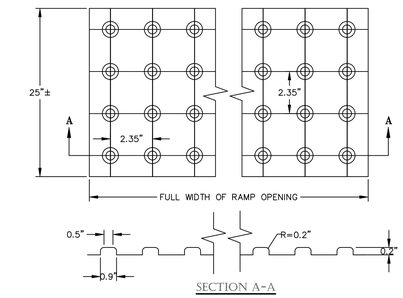
C-8.1

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:42 PM – LAYOUT C-8.1-DETAILS.1

NOTE:
1. ALL PARKING SPACES SHALL BE 9' WIDE X 19' LONG.



1 HANDICAP & STANDARD PARKING SAPCE
N.T.S.

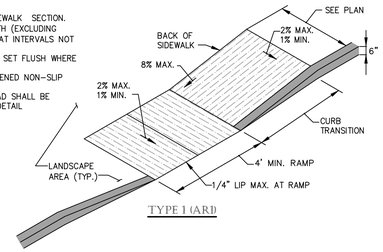


SECTION A-A

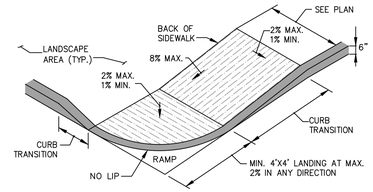
NOTES:
1. PANELS MAY BE PRECAST OR CAST-IN-PLACE CONCRETE, OR OTHER SUITABLE MATERIAL PERMANENTLY APPLIED TO THE RAMP.
2. THERE MUST BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND THE ADJOINING SURFACE.

2 DETECTABLE WARNING PLATE FOR ACCESSIBLE RAMPS
N.T.S.

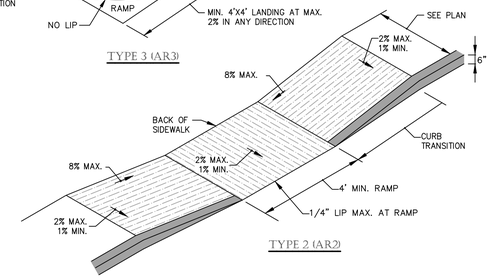
NOTES:
1. SEE PLANS FOR CURB TYPE.
2. CURBS AND WALKS ALONG ACCESSIBLE ROUTES SHALL MEET OR EXCEED THE APPLICABLE REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF JANUARY 1992.
3. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% (1% MIN.)
4. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTES, EXCLUDING CURB RAMPS SHALL BE 5%.
5. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 8%.
6. MAINTAIN A MINIMUM OF 3 FEET CLEAR AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTES (I.E., TREE WELLS, HYDRANTS, UTILITY POLES, SIGNS, ETC.)
7. GRADE BASE OF RAMP TO PREVENT PONDING.
8. RAMP CONSTRUCTION SHALL CONFORM TO TYPICAL SIDEWALK SECTION.
9. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'X5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
10. ALL CURBING AT RAMPS SHALL BE VERTICAL CURBING SET FLUSH WHERE IT ABUTS ROADWAY.
11. ALL RAMPS SHALL BE CEMENT CONCRETE WITH ROUGHENED NON-SLIP SURFACE.
12. ALL RAMPS EXISTING ONTO A PUBLIC OR PRIVATE ROAD SHALL BE EQUIPPED WITH A DETECTABLE WARNING PALTE, SEE DETAIL



TYPE 1 (AR1)

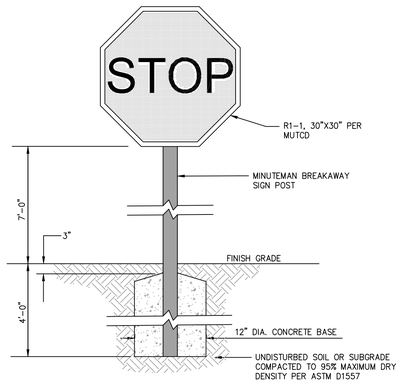


TYPE 3 (AR3)



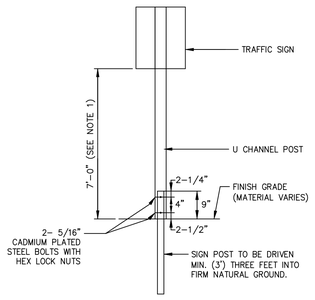
TYPE 2 (AR2)

3 ACCESSIBLE CURB RAMPS (AR)
N.T.S.

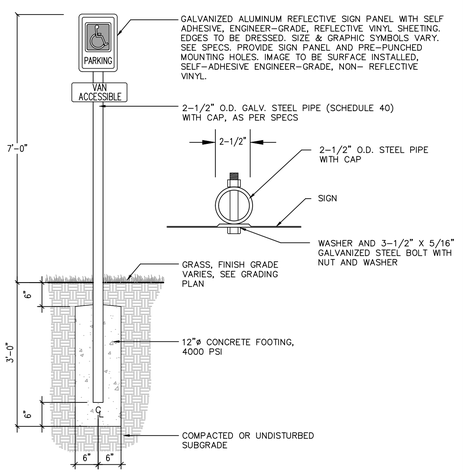


4 STOP SIGN
N.T.S.

NOTES:
1. SEE TRAFFIC CONTROL SCHEDULE FOR EXACT MOUNTING HEIGHT. 2. CHANNEL POST SECTIONS TO BE CONNECTED WITH AT LEAST TWO (2) APPROPRIATELY SIZED GALVANIZED BOLTS W/ LOCK WASHERS AND NUTS.

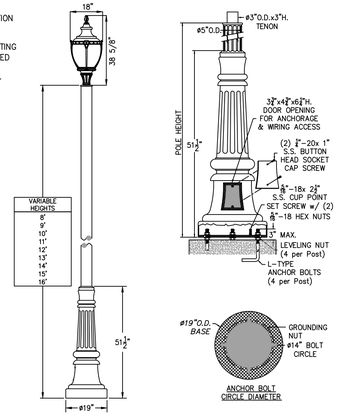


5 TYPICAL BREAKAWAY SIGN POST
N.T.S.



6 HANDICAP SIGN
N.T.S.

NOTES:
1. LIGHT POLE AND FIXTURE INSTALLATION SHALL BE TO MANUFACTURERS SPECIFICATIONS. LIGHT POLE AND FIXTURE SHALL BE STERNBERG LIGHTING "TOWN SQUARE" STYLE, OR APPROVED EQUAL.
2. FIXTURES SHALL UTILIZE LED BULBS.



7 TYPICAL LIGHT POLE
N.T.S.

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RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR
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CHECKED BY	JAB
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CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
CONSTRUCTION DETAILS
SHEET 2 OF 7

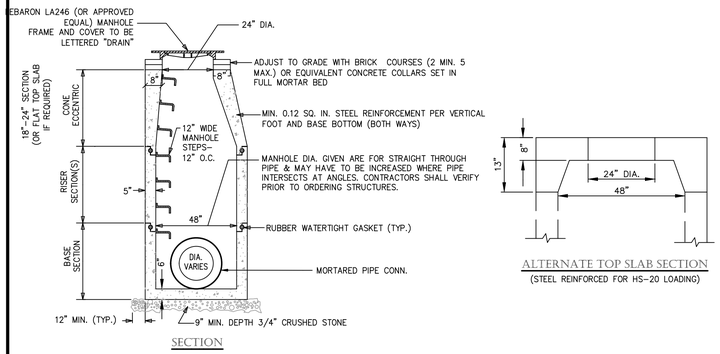
COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C-8.2

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:42 PM - LAYOUT C-8.2 DETAILS 2

NOTES:

1. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
2. CONCRETE COMPRESSIVE STRENGTH 4000 PSI MIN.
3. MANHOLE DESIGN CONFORMS TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. JOINT SEALANT SHALL BE SYNTHETIC RUBBER GASKET THAT COMPLIES W/ C-443 OR C-361. 5. BASE SECTION SHALL BE ONE POUR MONOLITHIC.

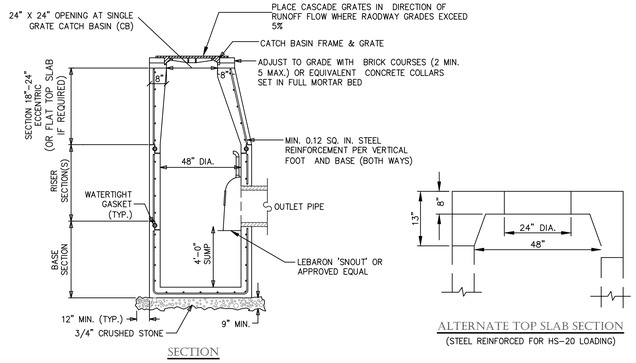


1 PRECAST CONCRETE DRAIN MANHOLE

N.T.S.

NOTES:

1. USE 4-FLANGE LEBARON LF248-2 (OR APPROVED EQUAL) GRATES AT ALL CB STRUCTURES.
2. SUBMIT SHOP DRAWINGS FOR APPROVAL. INSTALL CASCADE FROAMES AND GRATES IN LOCATIONS WHERE BROADWAYS EXCEEDS 5%
3. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
4. CONCRETE COMPRESSIVE STRENGTH 4000 PSI MIN.
5. JOINT SEALANT SHALL BE SYNTHETIC RUBBER GASKET THAT COMPLIES W/ C-443 OR C-361.

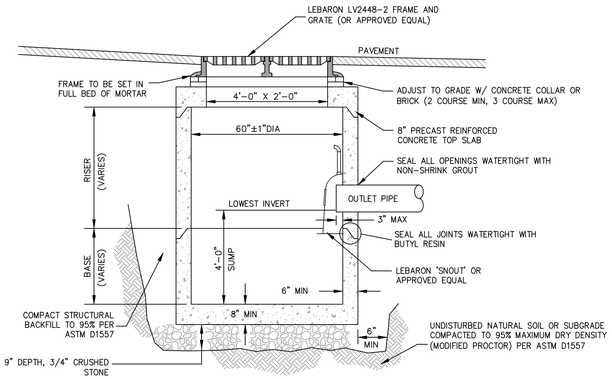


2 PRECAST CONCRETE DEEP SUMP CATCH BASIN

N.T.S.

NOTES:

1. 4,000 PSI PRECAST CONCRETE AT 28 DAYS CONFORMING WITH LATEST ASTM C478.
2. REINFORCING PER LATEST ASTM A185.
3. STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.
4. VERIFY FRAME AND GRATE TO SUIT APPLICATION



3 PRECAST CONCRETE DOUBLE GRATE DEEP SUMP CATCH BASIN

N.T.S.

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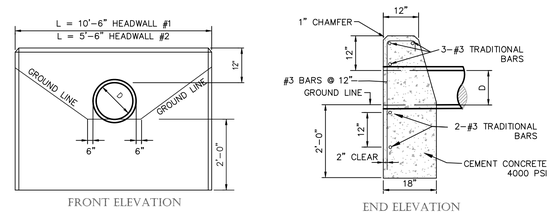
NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGNED FOR AASHTO HS-20 LOADING, 1-5 FEET COVER.

8 YARD DRAIN

N.T.S.

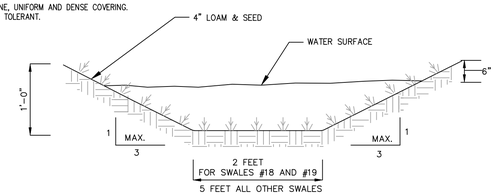


9 HEADWALL

N.T.S.

NOTES:

1. GRASS SPECIES TO BE FINE, UNIFORM AND DENSE COVERING.
2. SPECIES TO BE MOISTURE TOLERANT.



10 SWALE OPEN GRASSED CHANNEL

N.T.S.

1 OCS#1

N.T.S.

NOTES:

1. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM 3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP & PVC SEWER.

2 OCS#2 - OR APPROVED EQUAL

N.T.S.

NOTES:

1. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM 3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP & PVC SEWER.

1 OCS#3 - OR APPROVED EQUAL

N.T.S.

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
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(IN FEET)
1 inch = 40 feet

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CONSTRUCTION DETAILS

SHEET 3 OF 7

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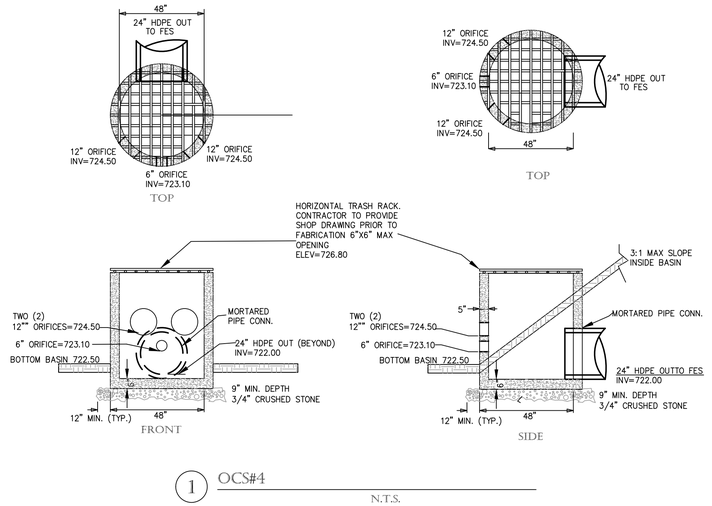
SHEET NO.

C-8.3



1 OCS#4

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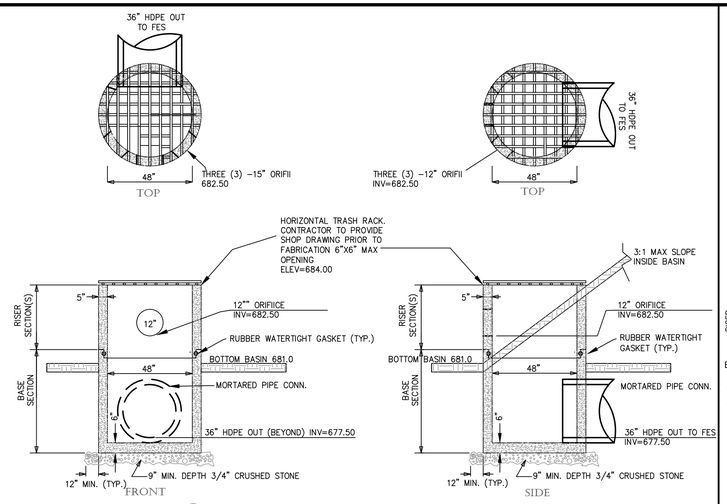
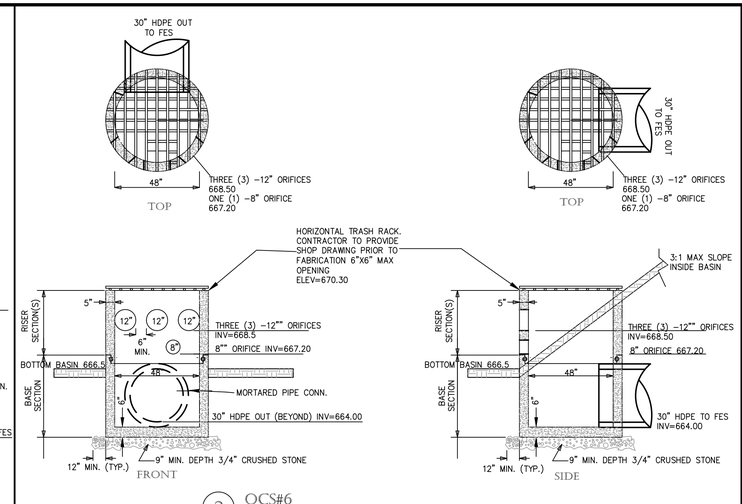


2 OCS#5

N.T.S.



3 OCS#6

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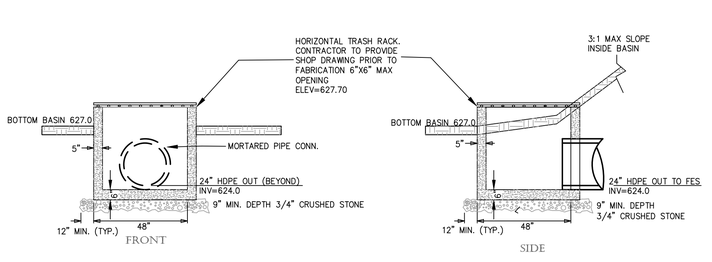

4 OCS#7

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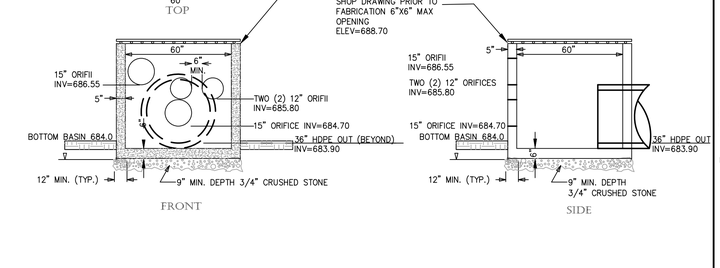
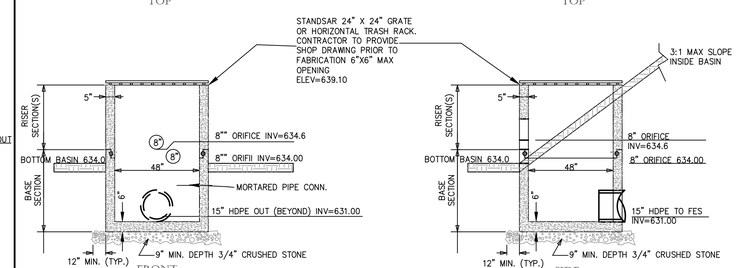


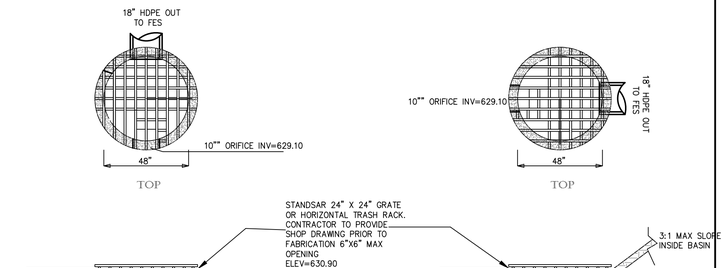
5 OCS#8

N.T.S.



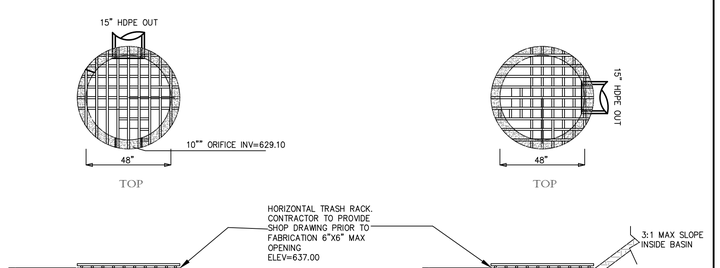
6 OCS#9

N.T.S.



7 OCS#10

N.T.S.



8 OCS#111

N.T.S.

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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

CONSTRUCTION DETAILS

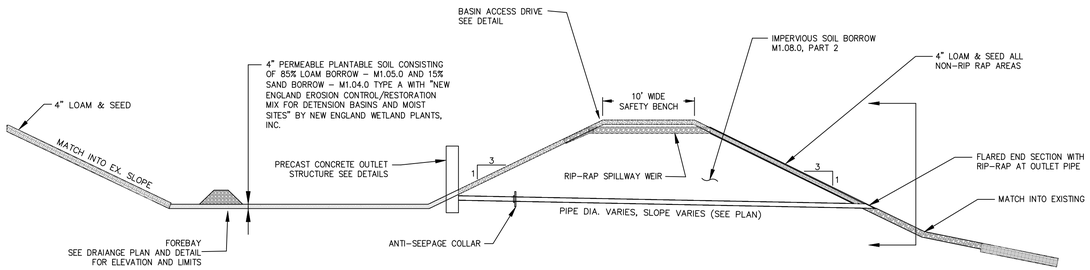
SHEET 4 OF 7

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

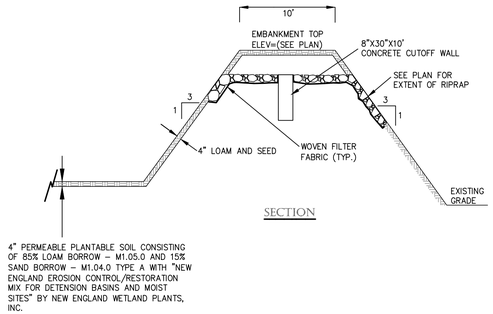
C-8.4

NOTES:
1. ALL TOP AND SUBSOIL SHALL BE REMOVED PRIOR TO CONSTRUCTION OF INFILTRATION BASIN.
2. INFILTRATION BASINS NOT TO BE USED FOR SEDIMENT BASINS DURING CONSTRUCTION.

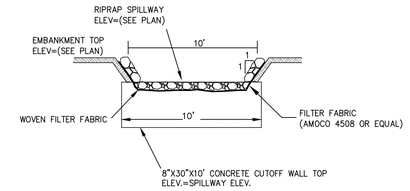


1 TYPICAL INFILTRATION BASIN CROSS SECTION
N.T.S.

NOTES:
1. EMBANKMENT TO BE CONSTRUCTED OF CLEAN FILL FREE OF ORGANIC SOILS/MATERIALS WITH NO STONES OVER 12" MAX. DIMENSION. EMBANKMENT TO TO BE CONSTRUCTED IN COMPACTED LIFTS NOT TO EXCEED 8".
2. BASIN SIDE SLOPES (INSIDE AND OUT) TO BECOVERED WITH 4" LOAM AND SEED.
3. RIP-RAP SPILLWAY STONE (M2.02.2).

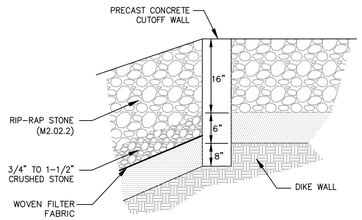


SECTION

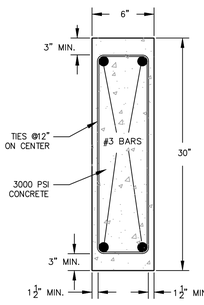


SPILLWAY PROFILE

2 TYPICAL BASIN EMBANKMENT/SPILLWAY
N.T.S.



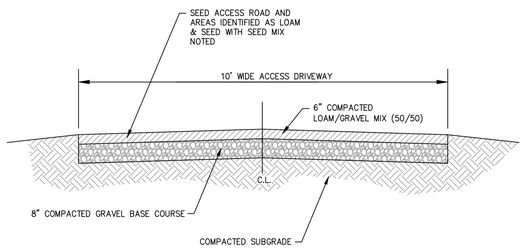
3 CUTOFF WALL CONFIGURATION
N.T.S.



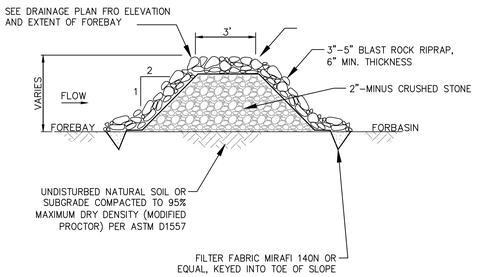
4 PRECAST CONCRETE CUTOFF WALL
N.T.S.

NOTE:
1. SEED ACCESS ROAD AND AREAS IDENTIFIED AS LOAM & SEED WITH SEED MIX NOTED BELOW

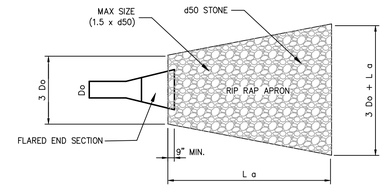
SEED WEIGHT	% BY
CREEPING FESCUE IMPROVED VARIETIES	70
KENTUCKY BLUE GRASS IMPROVED VARIETIES	15
PERENNIAL RYE GRASS IMPROVED VARIETIES	15



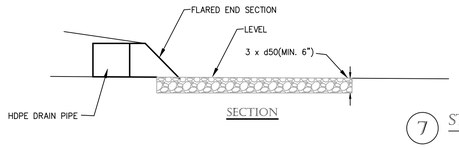
5 BASIN ACCESS DRIVE
N.T.S.



6 FOREBAY
N.T.S.



PLAN

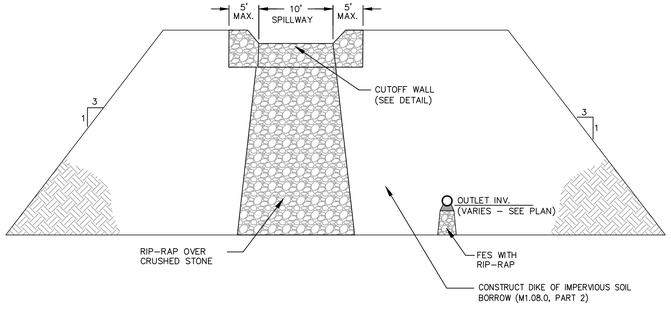


SECTION

7 STONE RIP-RAP FOR FES PIPE ENDS
N.T.S.

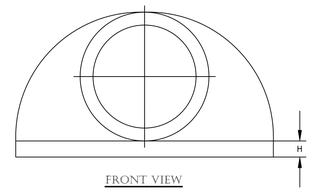
Do= Inside Diam. of Pipe
L a= (1.7 Q/Do 3/2) + 8 Do

FES #	Do (in)	3Do	La	3Do + La	d50 in-MED RIP RAP SIZE	MAX. RIP RAP SIZE
1	18	5	27	31	11	17
2	30	8	37	45	14	21
3	42	11	45	55	14	21
4	36	9	39	48	13	19
5	36	9	39	48	13	19
6	24	6	30	36	11	16
7	24	6	28	34	9	14
8	24	6	25	31	7	10
9	30	8	36	43	13	19
10	36	9	41	50	14	21
11	18	5	24	28	9	13
12	30	8	40	47	8	12
13	24	6	26	32	8	12
14	18	5	22	26	7	11
15	24	6	22	28	5	7
16	30	8	35	43	12	18
17	18	5	26	30	10	15
18	12	3	12	15	2	4
19	18	5	23	28	8	13
20	18	5	19	23	5	8
21	15	4	25	28	11	16

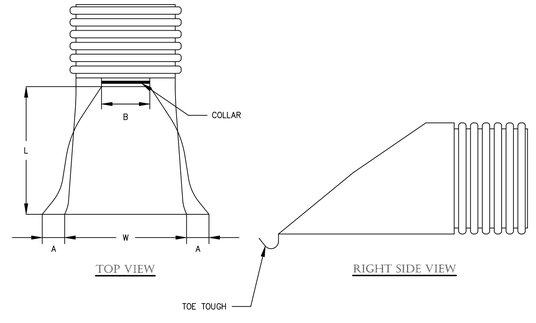


8 TYPICAL BASIN ELEVATION
N.T.S.

PIPE DIAMETER (INCHES)						
DIAMETER (INCHES)	12	15	18	24	30	36
A (INCHES)	6.5	6.5	7.5	7.5	7.5	7.5
B (MAX) (INCHES)	10.0	10.0	15.0	18.0	22.0	25.0
H (INCHES)	6.5	6.5	6.5	6.5	8.6	8.6
L (INCHES)	25.0	25.0	32.0	36.0	58.0	58.0
W (INCHES)	29.0	29.0	35.0	45.0	63.0	63.0



FRONT VIEW



TOP VIEW

RIGHT SIDE VIEW

9 CORRUGATED POLYETHYLENE FLARED-END SECTION (FES)
N.T.S.

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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS
PREPARED FOR
Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
CONSTRUCTION DETAILS
SHEET 5 OF 7

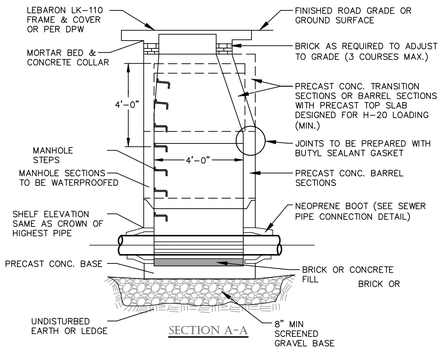
JAMES A. BERNARDINO No. 41717 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

SHEET NO.
C-8.5

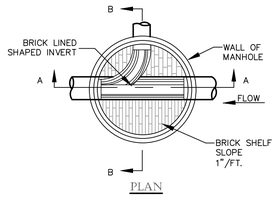
H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:43 PM – LAYOUT C8.5-DETAILS.5

NOTES:

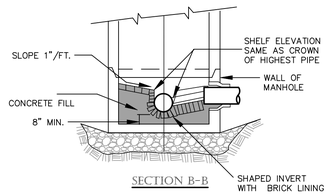
1. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
2. CONCRETE COMPRESSIVE STRENGTH 4000 PSI MIN.
3. MANHOLE DESIGN CONFORMS TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. JOINT SEALANT SHALL BE SYNTHETIC RUBBER GASKET THAT COMPLIES W/ C-443 OR C-361. 5. BASE SECTION SHALL BE ONE POUR MONOLITHIC.



SECTION A-A



PLAN

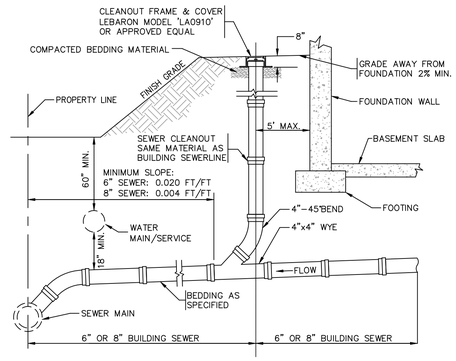


SECTION B-B

1 PRECAST CONCRETE SEWER MANHOLE

N.T.S.

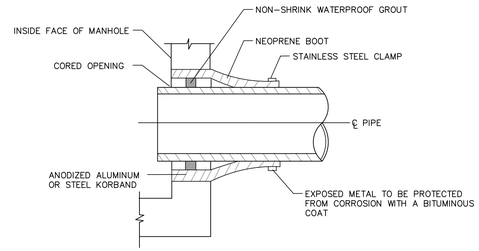
SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL



2 SERVICE CONNECTION TO SEWER MAIN

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL



3 SEWER PIPE MANHOLE CONNECTION

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL

NOTES:

1. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
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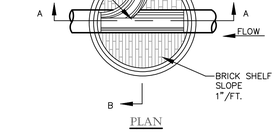
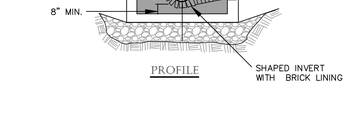
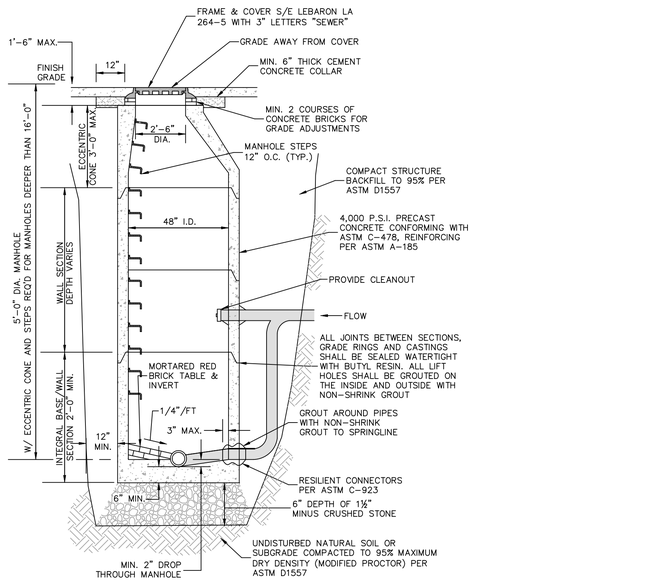


PLAN



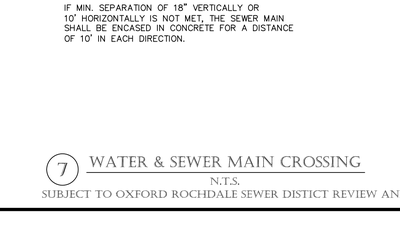
PROFILE



4 PRECAST CONCRETE DROP SEWER MANHOLE

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL



5 SEWER CHIMNEY RISER DETAIL

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL

6 PVC PIPE TRENCH SECTION

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL

CONCRETE ENCASEMENT SEE DETAIL

IF MIN. SEPARATION OF 18" VERTICALLY OR 10' HORIZONTALLY IS NOT MET, THE SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR A DISTANCE OF 10' IN EACH DIRECTION.

7 WATER & SEWER MAIN CROSSING

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL

9 SEWER CLEANOUT

N.T.S.

SUBJECT TO OXFORD ROCHDALE SEWER DISTICT REVIEW AND APPROVAL

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PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 feet

SHEET TITLE

CONSTRUCTION DETAILS

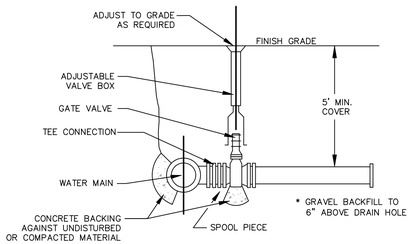
SHEET 6 OF 7

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

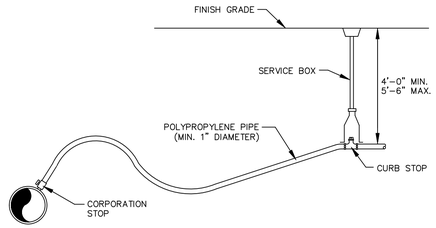
C-8.6

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:43 PM - LAYOUT C8.6-DETAILS.6

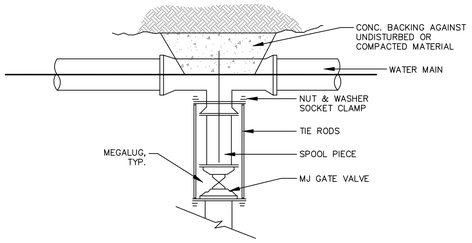


TYPICAL VALVE DETAIL

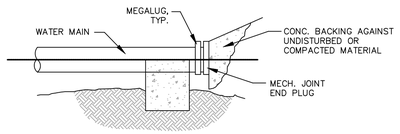
NOTES:
1. ALL FITTINGS SHALL BE COMPRESSION TYPE.
2. ALL APPURTANENCES SHALL CONFORM TO TOWN SPECIFICATIONS.
3. MECHANICAL JOINTS TO BE MEGALUG, OR APPROVED EQUAL.



TYPICAL WATER SERVICE DETAIL



TYPICAL VALVE CONNECTION - RESTRAINED JOINT TEE



TYPICAL PLUG DETAIL

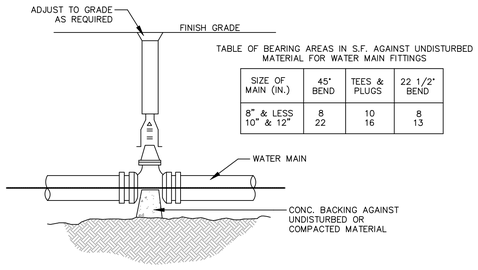
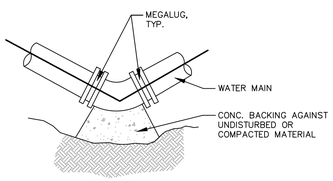


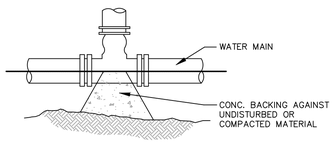
TABLE OF BEARING AREAS IN S.F. AGAINST UNDISTURBED MATERIAL FOR WATER MAIN FITTINGS

SIZE OF MAIN (IN.)	45° BEND	TEES & PLUGS	22 1/2° BEND
8" & LESS	8	10	8
10" & 12"	22	16	13

TYPICAL VALVE



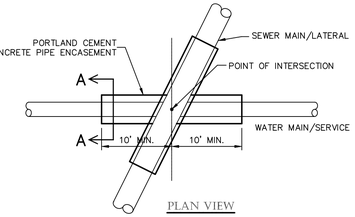
TYPICAL BEND DETAIL



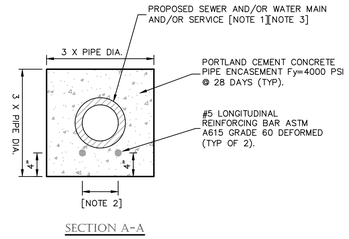
TYPICAL TEE

1 TYPICAL WATER SUPPLY DETAILS
N.T.S.
SUBJECT TO AQUARION WATER COMPANY REVIEW AND APPROVAL

NOTES:
1. CONCRETE PIPE ENCASEMENT TO EXTEND 10 FT ALONG SEWER LINE AND WATER LINE FROM POINT OF INTERSECTION.
2. DISTANCE EQUAL TO PIPE DIAMETER.
3. CONCRETE PIPE ENCASEMENT REQUIRED WHENEVER PROPOSED SEWER MAIN/LATERAL IS WITHIN 10' OF PROPOSED WATER MAIN/SERVICE.



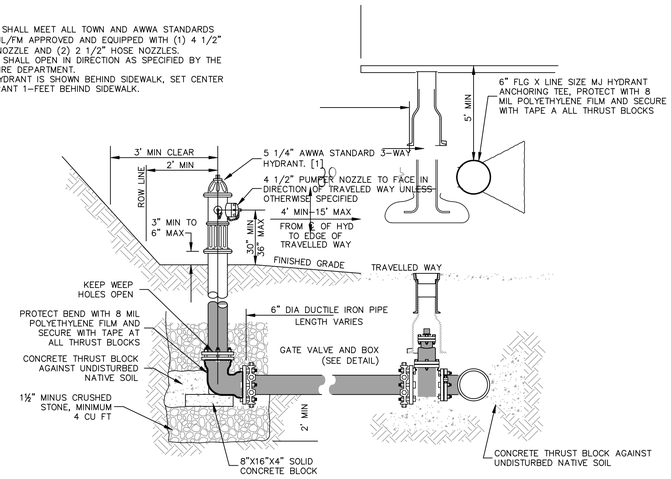
PLAN VIEW



SECTION A-A

2 PIPE ENCASEMENT
N.T.S.

NOTES:
1. HYDRANT SHALL MEET ALL TOWN AND AWWA STANDARDS AND BE UL/FM APPROVED AND EQUIPPED WITH (1) 4 1/2" PUMPER NOZZLE AND (2) 2 1/2" HOSE NOZZLES.
2. HYDRANT SHALL OPEN IN DIRECTION AS SPECIFIED BY THE LOCAL FIRE DEPARTMENT.
3. WHERE HYDRANT IS SHOWN BEHIND SIDEWALK, SET CENTER OF HYDRANT 1-FEET BEHIND SIDEWALK.



3 TYPICAL FIRE HYDRANT CONNECTION DETAIL
N.T.S.
SUBJECT TO AQUARION WATER COMPANY REVIEW AND APPROVAL

TURNING POINT ENGINEERING
CIVIL SITE DESIGN
P.O. Box 757 • Sutton, MA 01590
P:(508) 381-1515 F:(508) 647-0189
www.tpecivildesign.com

APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME
ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR
Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 feet

SHEET TITLE
CONSTRUCTION DETAILS
SHEET 7 OF 7

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C-8.7

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:44 PM - LAYOUT C8.7-DETAILS.7

TECHNICAL NOTES FOR TURFGRASS & PERENNIAL SEEDING:

1) SCOPE OF WORK: FOR THIS PROJECT, THE WORK SHALL INCLUDE SEEDING AREAS DENUDED BY CONSTRUCTION.

2) ALL AREAS SHALL BE SEEDED WITHIN 30 DAYS AFTER FINISHED GRADES ARE ESTABLISHED AND OTHER ELEMENTS INCLUDED IN THIS CONTRACT ARE CONSTRUCTED.

3) SEED SPECIFICATIONS:

A) LOW-MAINTENANCE TURFGRASS: SLOPES STEEPER THAN 3:1:

MIXTURE REQUIREMENTS ARE AS FOLLOWS (WITH APPROXIMATE PERCENTAGES):
24% CREEPING RED FESCUE
24% CHEWINGS FESCUE
24% SHEEPS FESCUE
24% HARD FESCUE
4% PERENNIAL RYEGRASS

B) TURFGRASS: AREAS RECEIVING FULL SUN OR PART SHADE, IN AREAS WITH SLOPES 3:1 OR LESS STEEP:

MIXTURE REQUIREMENTS ARE AS FOLLOWS (WITH APPROXIMATE PERCENTAGES):

35% FINE FESCUE (ENDOPHYTIC)
35% KENTUCKY BLUEGRASS
30% PERENNIAL RYEGRASS (ENDOPHYTIC)

C) TURFGRASS: AREAS RECEIVING MOSTLY SHADE, IN AREAS WITH SLOPES 3:1 OR LESS STEEP:

MIXTURE REQUIREMENTS ARE AS FOLLOWS (WITH APPROXIMATE PERCENTAGES):

90% FINE FESCUE (ENDOPHYTIC)
10% PERENNIAL RYEGRASS (ENDOPHYTIC)

D) ANY PROPOSED SUBSTITUTIONS SHALL BE PRESENTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO SEEDING.

E) ALL TURFGRASS SEED SHALL HAVE A MINIMUM PURITY OF 98 PERCENT AND A GERMINATION RATE OF 85 PERCENT.

F) ALL TURFGRASS SEED SHALL BE LABELED TO SHOW THAT IT IS WITHIN THE REQUIREMENTS OF THE USDA AS TO PURITY, GERMINATION, AND PRESENCE OF RESTRICTED OR PROHIBITED WEEDS.

H) DETENTION BASIN SEED MIX: SEE LANDSCAPE PLAN FOR LOCATION

"NATIVE DETENTION AREA MIX" AS PREPARED BY -OR APPROVED EQUAL:

ERNST CONSERVATION SEEDS, INC.
8884 MERCER PIKE, MEADVILLE, PA 16335
PHONE: 800-873-3321 / 814-336-2404
EMAIL: SALES@ERNSTSEED.COM
WEBSITE: WWW.ERNSTSEED.COM

MIX COMPOSITION:
28.0% PANICUM CLANDESTINUM, 'TIOGA' (DEERTONGUE, 'TIOGA')
24.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
20.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
20.0% PANICUM VIRGATUM, 'SHAWNEE' (SWITCHGRASS, 'SHAWNEE')
4.0% AGROSTIS PERENNANS, PA ECOTYPE (AUTUMN BENTGRASS, PA ECOTYPE)
3.0% JUNCUS TENUIS, PA ECOTYPE (PATH RUSH, PA ECOTYPE)
1.0% JUNCUS EFFUSUS (SOFT RUSH)

4) BED PREPARATION FOR AREAS TO BE SEEDED WITH TURFGRASS: A ROTOVATOR, CHISEL PLOW, OR CULTIVATOR SHALL BE USED TO WORK THE SOIL TO A DEPTH OF SIX INCHES. AFTER THIS OPERATION, REMOVE AND DISPOSE OF STICKS, STONES OVER 1 INCH DIAMETER, AND RUBBISH TO A MINIMUM DEPTH OF TWO INCHES.

5) LIME AND NUTRIENTS FOR TURFGRASS AREAS: LIME SHALL BE GROUND DOLOMITIC LIMESTONE, APPLIED AT THE RATE OF 50 POUNDS PER 1000 SQUARE FEET. LIME SHALL BE WELL-MIXED INTO THE TOP THREE INCHES OF LOAM.

6) FERTILIZER FOR TURFGRASS AREAS: FERTILIZER SHALL BE A COMMERCIAL GRADE WITH A MINIMUM OF 50 PERCENT OF THE NITROGEN COMPONENT IN A CONTROLLED RELEASE FORM LABELED TO RELEASE NITROGEN FOR A MINIMUM OF SIX WEEKS. FERTILIZER SHALL HAVE AN N:P:K RATIO IN THE RANGE OF 1:1:1 TO 1:2:2. IT SHALL BE APPLIED AT A RATE WHICH ACHIEVES ONE POUND OF NITROGEN PER 1000 SQUARE FEET.

7) SEEDING PROCEDURE FOR TURFGRASS: SOWING OF SEED SHALL BE DONE ONLY AFTER THE PREPARED SOIL, TO WHICH LIME AND FERTILIZER HAVE BEEN ADDED AS SPECIFIED, HAS BEEN THOROUGHLY SETTLED BY RAINFALL OR ARTIFICIAL WATERING. IMMEDIATELY BEFORE ANY SEED IS SOWN, THE GROUND SHALL BE SCARIFIED AS SPECIFINLY WITH A MECHANICAL SPREADER. SEED MIXTURES SHALL BE SOWN AT A RATE OF 5 POUNDS PER 1000 SQUARE FEET. AFTER SEEDING, THE LAWN SHALL BE LIGHTLY RAKED, ROLLED WITH A 200-POUND ROLLER, AND WATERED WITH A FINE SPRAY. THIS METHOD OF SEEDING MAY BE VARIED AT THE DISCRETION OF THE CONTRACTOR ON HIS OWN RESPONSIBILITY TO ESTABLISH A SMOOTH, UNIFORMLY GRASSED LAWN.

8) SEED FOR PERMANENT TURFGRASS SHALL ONLY BE SOWN FROM THE THIRD WEEK IN APRIL THROUGH JUNE AND DURING THE MONTH OF SEPTEMBER.

9) TEMPORARY SEEDING FOR EROSION CONTROL: IN THE EVENT THAT THE CONTRACT IS SUSPENDED, TEMPORARY SEEDING SHALL BE USED ON ANY BARE AREAS THAT MAY BE SUBJECT TO EROSION AND WHERE TEMPORARY VEGETATION CAN BE USED TO RETARD EROSION FROM 2 TO 12 MONTHS. THE SEED TYPE USED FOR TEMPORARY COVER SHALL BE 100 PERCENT TALL FESCUE APPLIED AT A RATE OF 300 POUNDS PER ACRE.

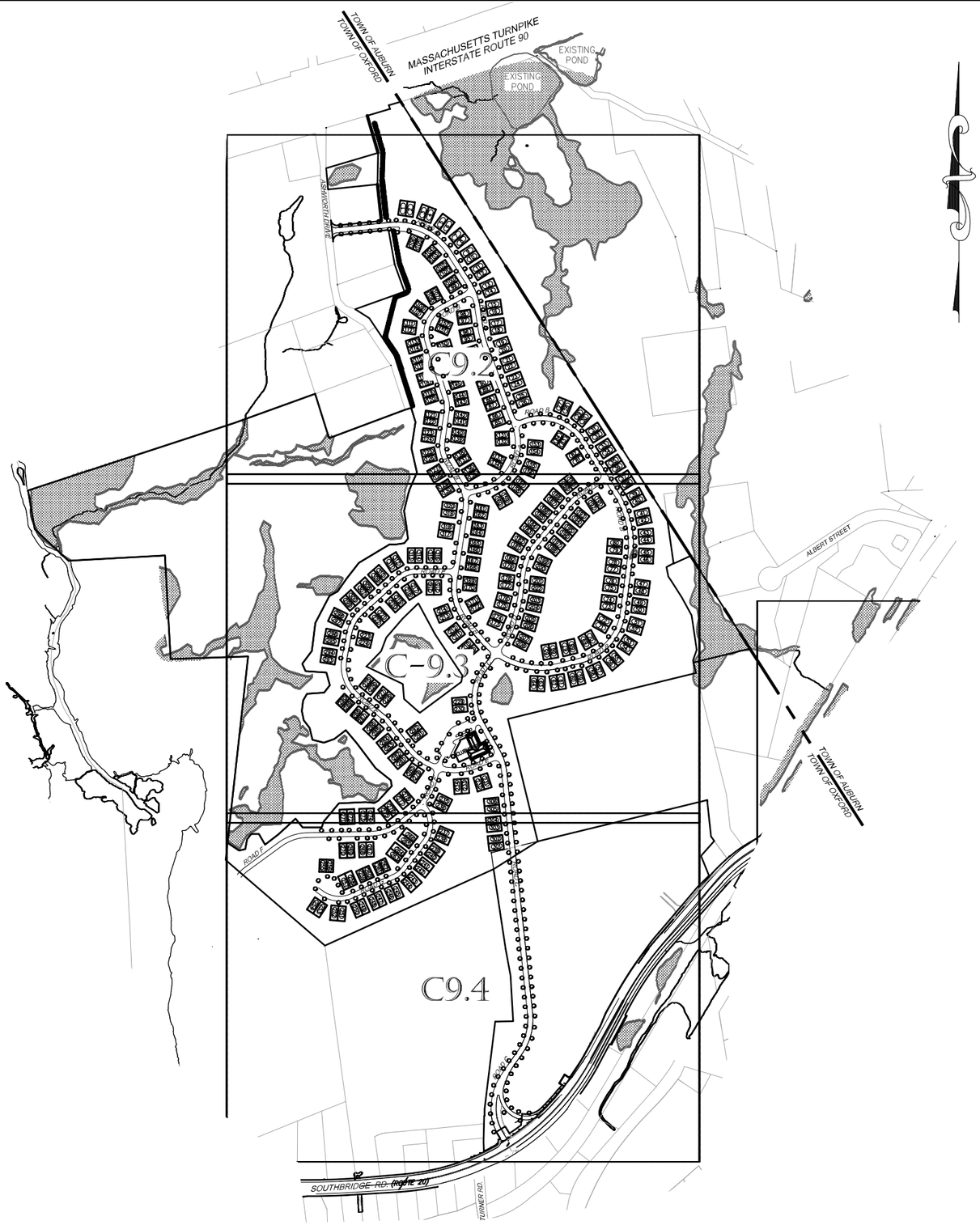
10) MAINTENANCE: MAINTAIN THE TURFGRASS FROM TIME OF INSTALLATION UNTIL THE FINAL INSPECTION IMMEDIATELY PRIOR TO THE BEGINNING OF THE GUARANTEE PERIOD. MAINTENANCE SHALL INCLUDE WATERING OF TURF AREAS, REPAIRS TO TURF AREAS, AND OTHER NECESSARY OPERATIONS. THE MAINTAINED TURF AREAS (EXCEPT FOR LOW-MAINTENANCE TURF ON STEEP SLOPES) SHALL BE MOWED TO A UNIFORM HEIGHT OF APPROXIMATELY TWO AND ONE-HALF INCHES. MOWING SHALL BE PROVIDED AS REQUIRED SO THAT THE TURF NEVER EXCEEDS FOUR INCHES IN HEIGHT. TURF SHALL BE PROTECTED AND REPLANTED AS NECESSARY TO ESTABLISH A UNIFORM STAND OF THE SPECIFIED TURF AND UNTIL ACCEPTANCE. SCATTERED BARE SPOTS, NONE OF WHICH IS LARGER THAN ONE SQUARE FOOT, WILL BE ALLOWED UP TO A MAXIMUM OF THREE PERCENT OF ANY TURF AREA. WHEN TURF AREAS ARE READY FOR FINAL INSPECTION, THE MAINTAINED TURF AREAS SHALL BE NEATLY MOWED TO THE UNIFORM HEIGHTS AS NOTED ABOVE. THE LAWNS SHALL BE CONSIDERED ESTABLISHED ONLY WHEN THE SPECIFIED GRASS IS VIGOROUS AND GROWING WELL IN ADDITION TO MEETING THE OTHER REQUIREMENTS SPECIFIED. AT THE TIME OF ACCEPTANCE FOLLOWING FINAL INSPECTION, THE CONTRACTOR IS RELIEVED OF ROUTINE MAINTENANCE RESPONSIBILITIES FOR THE TURF UNDER THIS CONTRACT.

11) FINAL INSPECTION, CLEANUP AND COMPLETION: FINAL INSPECTION SHALL BE FOR THE COMPLETED LANDSCAPE AND SHALL BE MADE AT THE CONCLUSION OF THE LANDSCAPE WORK. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL EQUIPMENT AND OTHER ARTICLES USED. ALL EXCESS SOIL, STONES, AND DEBRIS SHALL BE REMOVED FROM THE SITE. ALL WORK AREAS SHALL BE LEFT IN A CLEAN AND NEAT CONDITION. ALL DAMAGE TO EXISTING CONSTRUCTION CAUSED BY THE LANDSCAPING OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

12) GUARANTY AND REPLACEMENT: IF A SATISFACTORY STAND OF MAINTAINED TURF HAS BEEN PRODUCED AT THE TIME OF FINAL INSPECTION, IT SHALL BE GUARANTEED THROUGH ONE COMPLETE GROWING SEASON, IF RENOVATION AND/OR RESEEDING ARE REQUIRED AT THE END OF THE GUARANTEE PERIOD, THIS WORK SHALL BE DONE IN CONFORMANCE WITH THE REQUIREMENTS NOTED ABOVE. IF A SATISFACTORY STAND OF MAINTAINED TURF HAS NOT BEEN PRODUCED AT THE TIME OF FINAL INSPECTION, NECESSARY REPAIRS SHALL BE PERFORMED IN CONFORMANCE WITH THE REQUIREMENTS NOTED ABOVE, UPON COMPLETION OF THESE REPAIRS, THE TURF GRASS SHALL BE GUARANTEED AS NOTED ABOVE.

IRRIGATION NOTE:

- SITE IRRIGATION SHALL NOT CONNECT TO THE PUBLIC WATER SYSTEM.
- CONTRACTOR SHALL COORDINATE THE NUMBER, LOCATION AND REQUIREMENTS FOR ON SITE IRRIGATION WELL(S).
- CONTRACTOR SHALL PROVIDE DESIGN BUILD IRRIGATION PLANS FOR OWNERS REVIEW PRIOR TO INSTALLATION .



TECHNICAL NOTES FOR TREE, SHRUB, GROUNDCOVER, AND PERENNIAL PLANTINGS:

1) NOMENCLATURE: THE NAMES OF PLANTS REQUIRED UNDER THIS CONTRACT SHALL CONFORM TO THOSE GIVEN IN STANDARDIZED PLANT NAMES, LATEST EDITION, PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF VARIETIES NOT INCLUDED THEREIN SHALL CONFORM GENERALLY WITH NAMES ACCEPTED IN THE NURSERY TRADE.

2) QUALITY AND SIZE: PLANTS SHALL HAVE A HABIT OF GROWTH THAT IS NORMAL FOR THE SPECIES AND SHALL BE SOUND, HEALTHY, VIGOROUS, AND FREE FROM INSECT PESTS, PLANT DISEASES, AND INJURIES. ALL PLANTS SHALL EQUAL OR EXCEED THE MEASUREMENTS SPECIFIED IN THE PLANT LIST, WHICH ARE MINIMUM ACCEPTABLE SIZES. THEY SHALL BE MEASURED BEFORE PRUNING IS DONE AT TIME OF PLANTING. REQUIREMENTS FOR THE MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND BURLAPPING OF PLANTS IN THE PLANT LIST SHALL FOLLOW THE CODE OF STANDARDS CURRENTLY RECOMMENDED BY THE AMERICAN ASSOCIATIONS OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK.

3) SUBSTITUTIONS: SUBSTITUTIONS WILL BE PERMITTED ONLY UPON SUBMISSION OF PROOF THAT ANY PLANT AS SPECIFIED IS NOT OBTAINABLE DURING THE SCHEDULED PLANTING SEASON. WRITTEN AUTHORIZATION BY THE LANDSCAPE ARCHITECT SHALL BE REQUIRED FOR ANY SUBSTITUTION. THE NEAREST EQUIVALENT SIZE OR VARIETY OF PLANT HAVING THE SAME ESSENTIAL CHARACTERISTICS SHALL BE PROPOSED FOR SUBSTITUTION.

4) BALLED AND BURLAPPED MATERIALS: PLANTS DESIGNATED "B&B" IN THE PLANT LIST SHALL BE BALLED AND BURLAPPED. THEY SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH OF SUFFICIENT DIAMETER AND DEPTH TO ENCOMPASS THE FIBROUS AND FEEDING ROOT SYSTEM NECESSARY FOR FULL RECOVERY OF THE PLANT. MATERIAL SHALL BE IN A CONDITION WHERE THE NATURAL ROOT COLLAR OF THE PLANT IS WITHIN APPROXIMATELY TWO (2) INCHES OF THE SOIL LEVEL OF THE BALL. BALLS SHALL BE FIRMLY WRAPPED WITH BURLAP OR SIMILAR MATERIAL AND BOUND WITH TWINE, CORD, OR WIRE MESH. NO SYNTHETIC FABRIC IS ALLOWED. WHERE NECESSARY TO PREVENT BREAKING OR CRACKING OF THE BALL DURING THE PROCESS OF PLANTING, THE BALL MAY BE SECURED TO A PLATFORM. BALLS SHALL BE KEPT MOIST AND SHADED UNTIL THEY ARE PLANTED. REMOVE ALL BALL TIES OR STRAPPING FROM ROOT BALL PRIOR TO PLANTING. PLANT IN ACCORDANCE WITH TREE AND SHRUB PLANTING DETAILS.

5) CONTAINER-GROWN MATERIALS: PLANTS NOT DESIGNATED OTHERWISE IN THE PLANT LIST MAY BE PURCHASED AS CONTAINER-GROWN OR BALLED/BURLAPPED. CONTAINER-GROWN PLANTS, ESTORED ON THE SITE, SHALL BE WATERED THOROUGHLY AT LEAST ONCE EVERY 48 HOURS. ROOT SYSTEMS OF CONTAINER-GROWN PLANTS SHALL BE WELL-DEVELOPED BUT NOT IN "POT-BOUND" CONDITION OF DENSE, ENCIRCLING ROOTS. THE ROOT BALL OF THE PLANT SHALL BE LOOSENED TO ALLEVIATE ENCIRCLING ROOTS AND TO PROVIDE AN INCREASED ROOT INTERFACE WITH THE FILL SOIL. PLANT IN ACCORDANCE WITH TREE, SHRUB, AND GROUNDCOVER PLANTING DETAILS.

6) PROTECTION OF PLANTS PRIOR TO INSTALLATION: THE ROOT ZONE OF ALL PLANTS NOT YET INSTALLED SHALL BE PROTECTED FROM FREEZING, DRYING, AND DIRECT SUNLIGHT.

7) MULCHING: DOUBLE-SHREDDED HARDWOOD MULCH SHALL BE USED AS THE MULCH FOR ALL PLANT BEDS INDICATED ON THE LANDSCAPE PLAN, INCLUDING AREAS SURROUNDING THE PLANTS AS SHOWN ON THE TREE, SHRUB, AND GROUNDCOVER PLANTING DETAILS.

8) PLANTING SEASON: THE NORMAL PLANTING SEASON IS APRIL THROUGH NOVEMBER. SOME PLANTS SPECIFIED AS BALLED AND BURLAPPED CANNOT BE DUG DURING PORTIONS OF THIS PLANTING SEASON -- CHECK WITH NURSERIES FOR SPECIFICS. PLANTING OPERATIONS SHALL BE CONDUCTED UNDER FAVORABLE WEATHER CONDITIONS DURING THE NORMAL PLANTING SEASON.

9) WEATHER CONDITIONS: PLANTING SHALL NOT TAKE PLACE WHEN SOILS ON SITE ARE FROZEN OR WET AND IN POOR TILTH.

10) LAYOUT: NEW PLANTINGS SHALL BE LOCATED ACCORDING TO THE LANDSCAPE PLAN. THE CONTRACTOR SHALL STAKE THE PLANT LOCATIONS, AND SHALL THEN CONTACT THE LANDSCAPE ARCHITECT FOR APPROVAL.

11) SETTING PLANTS: ALL PLANTS SHALL BE PLANTED IN PREPARED SOILS BEDS, AND SET ON FIRM SOIL TO SUCH DEPTH AS INDICATED IN THE PLANTING DETAILS. TREES, SHRUBS, GROUNDCOVERS, AND PERENNIALS SHALL BE SET SO THAT THE PLANT'S NATURAL ROOT COLLAR OR CROWN IS ABOVE FINISHED GRADE AT THE HEIGHTS INDICATED IN THE PLANTING DETAILS. NO BURLAP SHALL BE PULLED FROM UNDER THE BALLS. ROOTS ON BARE-ROOT PLANTS SHALL BE SPREAD IN THEIR NORMAL POSITION. ALL BROKEN OR FRAYED ROOTS SHALL BE CUT OFF CLEANLY. PREPARED SOIL SHALL BE PLACED AND COMPACTED CAREFULLY TO AVOID INJURY TO ROOTS, TO FILL ALL VOIDS, AND TO MINIMIZE ROCKING OF ROOT BALL. ADD WATER AND TAMP THE BACKFILL UNTIL THE BACKFILL IS COMPLETELY SATURATED, THEN ALLOW IT TO SOAK AWAY. FILL THE HOLE TO FINISHED GRADE, AND FORM A SAUCER AROUND EACH TREE AND SHRUB BY PLACING A RIDGE OF TOPSOIL AROUND THE EDGE OF EACH ROOT BALL, IN ACCORDANCE WITH THE PLANTING DETAILS. AFTER THE GROUND SETTLES, ADDITIONAL SOIL SHALL BE FILLED IN TO THE LEVEL OF THE FINISHED GRADE, AND WATERED.

12) STAKING TREES: DO NOT STAKE TREES, UNLESS TREES ARE PLANTED ON STEEP SLOPES, IN WHICH CASE THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT FOR PERMISSION TO STAKE THOSE TREES.

13) MAINTENANCE: MAINTAIN PLANTS AND PLANT BEDS FROM THE TIME OF INSTALLATION UNTIL THE FINAL INSPECTION IMMEDIATELY PRIOR TO COMMENCEMENT OF THE GUARANTEE PERIOD. MAINTENANCE SHALL INCLUDE WATERING AND PROTECTION OF PLANTINGS AND OTHER NECESSARY OPERATIONS.

14) FINAL INSPECTION: WHEN THE TREE AND SHRUB PLANTINGS ARE READY FOR FINAL INSPECTION, ALL MULCHED AREAS SHALL BE FREE FROM WEEDS AND MULCHED TO THE EXTENT INDICATED ON THESE DRAWINGS. PLANT TAGS SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO THE INSPECTION FOR ACCEPTANCE.

15) GUARANTEE: AFTER ACCEPTANCE AT TIME OF FINAL INSPECTION, ALL PLANTS SHALL BE GUARANTEED FOR ONE (1) YEAR. PLANTINGS SHALL BE ALIVE AND IN SATISFACTORY VIGOR AT THE END OF THE GUARANTEE PERIOD.

16) REPLACEMENT: AT THE END OF THE GUARANTEE PERIOD, ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR IN POOR VIGOR SHALL BE REMOVED FROM THE SITE. THESE AND ANY MISSING PLANTS SHALL BE REPLACED AS SOON AS CONDITIONS PERMIT, BUT DURING THE NORMAL PLANTING SEASON. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AS ORIGINALLY PLANTED AND SHALL BE OF SIZE EQUAL TO THAT ATTAINED BY ADJACENT PLANTS OF THE SAME KIND AT THE TIME REPLACEMENT IS MADE. ONLY ONE REPLACEMENT WILL BE REQUIRED FOR EACH PLANT DECLARED DEAD, IN AN UNHEALTHY OR BADLY IMPAIRED CONDITION, OR MISSING AT THE TIME OF FINAL INSPECTION.

TECHNICAL NOTES FOR LOAM BORROW:

1) SCOPE OF WORK: FOR THIS PROJECT, THE WORK SHALL INCLUDE PLACING LOAM ALL AREAS TO RECEIVE PLANTS AND TURFGRASS SEEDING.

2) THE CONTRACTOR SHALL FURNISH A CERTIFIED LABORATORY REPORT SHOWING THE SOILS CLASSIFICATION AND NUTRIENT ANALYSIS OF REPRESENTATIVE SAMPLES OF THE LOAM THIS IS PROPOSED TO BE USED, INCLUDING THE EXTENT OF LIME AND FERTILIZER REQUIRED. ALL COSTS FOR SUCH WORK SHALL BE BORNE BY THE CONTRACTOR.

3) IN ACCORDANCE WITH THE SPECIFIC REQUIREMENTS OF THIS PROJECT, EXISTING ON-SITE SOIL MAY BE RE-USED AS LOAM BORROW ONLY IF IT MEETS THIS SPECIFICATION. EXISTING TOPSOIL THAT DOES NOT MEET THIS SPECIFICATION MAY BE RE-USED ONLY UP TO THE SUBGRADE ELEVATION WITHIN THE LIMITS OF AREAS TO RECEIVE NEW LOAM BORROW. THE CONTRACTOR SHALL FURNISH ALL REQUIRED LOAM BORROW, FROM OFF-SITE SOURCES, AS NECESSARY, TO COMPLETE THE PROJECT.

4) SCREENED LOAM SHALL BE "FINE SANDY LOAM" OR "SANDY LOAM" DETERMINED BY MECHANICAL ANALYSIS (ASTM D-422) AND BASED ON THE "USDA CLASSIFICATION SYSTEM". SCREENED LOAM SHALL HAVE THE FOLLOWING MECHANICAL ANALYSIS:

TEXTURAL CLASS PERCENTAGE	PERCENTAGE OF TOTAL WEIGHT	AVERAGE PERCENTAGE
SAND (0.05 - 2.0 MM)	45 - 75	60
SILT (0.002 - 0.05 MM)	5 - 35	25
CLAY (LESS THAN 0.002 MM)	5 - 20	15

5) SCREENED LOAM SHALL BE A NATURAL PRODUCT CONSISTING PRIMARILY OF NATURAL TOPSOIL, FREE FROM SUBSOIL, AND OBTAINED FROM AN AREA THAT HAS NEVER BEEN STRIPPED BEFORE. SCREENED LOAM SHALL NOT CONTAIN LESS THAN FIVE PERCENT (5%) NOR MORE THAN TEN PERCENT (10%) ORGANIC MATTER. TO ADJUST ORGANIC MATTER CONTENT, THE SOIL MAY BE AMENDED, PRIOR TO SITE DELIVERY, BY THE ADDITION OF COMPOSTED LEAF MOLD OR PEAT MOSS. NO MIXING OR AMENDING OF LOAM IS PERMITTED ON SITE.

6) THE LOAM SHALL NOT BE DELIVERED IN A WET OR FROZEN CONDITION.

7) SCREENED LOAM SHALL CONSIST OF FERTILE, FRIABLE, LOAM CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. LOAM SHALL BE WITHOUT ADMIXTURE OF SUBSOIL AND REFUSE. IT SHALL BE A HOMOGENEOUS MATERIAL FREE OF STONES GREATER THAN ONE-HALF (1/2) INCH IN THE LONGEST DIMENSION; FREE OF LUMPS, PLANTS, GRASS, ROOTS, STICKS, EXCESSIVE STONE CONTENT, DEBRIS, AND EXTRANEOUS MATTER AS DETERMINED BY THE OWNER.

8) SCREENED LOAM SHALL BE WITHIN THE PH RANGE OF 6.0 TO 6.5. IT SHALL BE UNCONTAMINATED BY SALT WATER, FOREIGN MATTER, AND SUBSTANCES HARMFUL TO PLANT GROWTH. THE MAXIMUM SOLUBLE SALT INDEX SHALL BE 100. SCREENED LOAM SHALL NOT HAVE LEVELS OF ALUMINUM GREATER THAN 200 PARTS PER MILLION.

9) SEE TURFGRASS NOTES FOR LIME AND FERTILIZER REQUIREMENTS FOR LAWN AREAS.

10) TOPSOIL STRUCTURE SHALL NOT BE DESTROYED THROUGH EXCESSIVE AND UNNECESSARY HANDLING OR COMPACTION. INAPPROPRIATE HANDLING LEADING TO THE COMPACTION OF DETERIORATION OF SOIL STRUCTURE WILL RESULT IN REJECTION OF TOPSOIL FOR USE.

11) AT NO TIME SHALL EQUIPMENT OR MATERIAL REST ON THE SOIL.

12) THE CONTRACTOR SHALL FURNISH AND SPREAD LOAM TO A MINIMUM 6 INCH DEPTH (AFTER SOIL SETTLEMENT) IN ALL LAWN AND PLANT BED AREAS. SUBSOIL SHALL BE SCARIFIED PRIOR TO PLACEMENT OF LOAM. THE TOP OF THE SETTLED LOAM BORROW LAYER SHALL BE TO GRADES SPECIFIED ON THE DRAWINGS. NO COMPACTION SHALL BE REQUIRED BEYOND THAT EXTENT NECESSARY TO PLACE SOD OR OR TO PLANT TREES AND SHRUBS TO ENSURE AGAINST UNEVENNESS OR SETTLING BELOW ACCEPTED GROWTH LINES.

TURNING POINT ENGINEERING
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P.O. Box 757 • Sutton, MA 01590
P:(508) 381-1515 F:(508) 647-0189
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APPROVAL UNDER SITE PLAN REVIEW.
OXFORD PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME: ASHWORTH HILLS
RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS
PREPARED FOR: Eastland Partners, Inc.
957 Millbury Street
Worcester, MA 01607

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO.	TPE-1001D
DESIGNED BY	JAB, TRB
CHECKED BY	JAB
DATE	NOVEMBER 15, 2024
CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE
300 0 150 300 600
(IN FEET)
1 inch = 300 feet

SHEET TITLE
LANDSCAPE INDEX AND NOTE SHEET
SHEET 1 OF 5

COMMONWEALTH OF MASSACHUSETTS
JAMES A. HARDING
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C-9.0

TURNING POINT ENGINEERING
CIVIL SITE DESIGN
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PROJECT NAME

ASHWORTH HILLS

RESIDENTIAL DEVELOPMENT

#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

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PLAN NO.	L-458

GRAPHIC SCALE

80 0 40 80 160
(IN FEET)
1 inch = 80 feet

SHEET TITLE

LANDSCAPE PLAN AND DETAILS

SHEET 2 OF 5

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-9.1

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:47 PM – LAYOUT C9.1-LS

PROPOSED STREET TREE (TYP.)

PROPOSED BASIN SEED MIX.

PROPOSED STREET TREE (TYP.)

PROPOSED STREET TREE (TYP.)

PROPOSED STREET TREE (TYP.)

PROPOSED STREET TREE (TYP.)

PROPOSED STREET TREE (TYP.)

PROPOSED BASIN SEED MIX.

PROPOSED BASIN SEED MIX.

PROPOSED STREET TREE (TYP.)

PROPOSED STREET TREE (TYP.)

MASS STATE PLANE

REBAR/PIND

N/F
CHARTER COMMUNICATIONS ENTERTAINMENT I, LLC
195 SOUTHBRIDGE RD
MAP 00, BLOCK A, PARCEL 01.01
BOOK 21800 PAGE 221

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PLAN NO.	L-458

GRAPHIC SCALE

80 0 40 80 160
(IN FEET)
1 inch = 80 feet

SHEET TITLE

LANDSCAPE PLAN AND DETAILS

SHEET 3 OF 5

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-9.2

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:48 PM - LAYOUT C9.2-LS

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RESIDENTIAL DEVELOPMENT

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ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
OXFORD, MASSACHUSETTS

PREPARED FOR

Eastland

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

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PLAN NO.	L-458

GRAPHIC SCALE

80 0 40 80 160
(IN FEET)
1 inch = 80 feet

SHEET TITLE

LANDSCAPE PLAN AND DETAILS

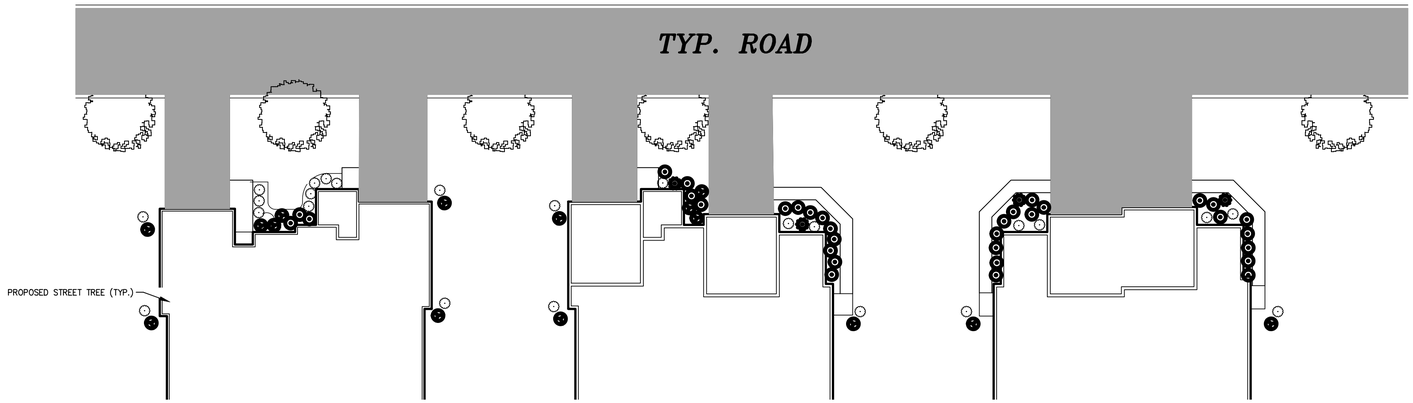
SHEET 4 OF 5

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-9.3

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:49 PM – LAYOUT C9.3-LS



TYPICAL UNIT PLANTING

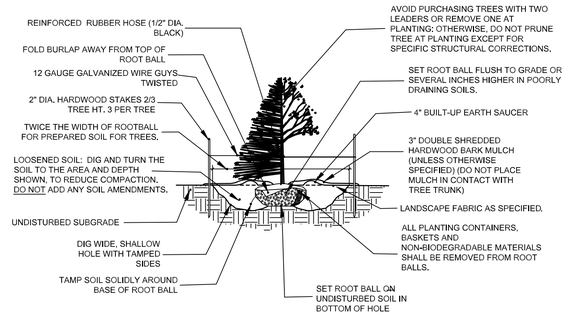
NOT TO SCALE

SHOWN WITH VARIATIONS IN DRIVEWAY CONFGIATIONS.

PLANT SCHEDULE FOR TYPICAL TWO UNIT (DUPLEX) PLANTING			
BOTANICAL NAME	**COMMON NAME**	**MIN SIZE AT PLANTING**	**PLANTING SPACING AND NOTES:**
BUZZ MIDNIGHT' BETTERFLY BUSH	BUDDEIA DAVIDI 'BUZZ MIDNIGHT'	36" HT.	POT OR B&B
BLUE CHIP' BUTER FLY BUSH	DUDDEIA DAVIDI 'BLUE CHIP'	36" HT.	POT OR B&B
DARK KNIGHT' BLUEBEARD	CARYOPTERIS X CLANDONENSIS 'DARK	36" HT.	POT OR B&B
GOLDEN MOPS' HINOKI CYPRESS	CHAMAECYPARIS OBTUSA 'GOLDEN MC	36" HT.	POT OR B&B
PEARL GLAM' CALLICARPA	CALLICARPA SP. 'PEAL GLAM'	36" HT.	POT OR B&B
IVORY HALO' DOGWOOD	CORNUS ALBA 'IVORY HALO'	36" HT.	POT OR B&B
GOLD SPLASH' EUONYMUS	EUONYMUS FORTUNEI 'GOLD SPLASH'	36" HT.	POT OR B&B
LADY STANLEY' ROSE OF SHARON	HISBISCUS SYRIACUS 'LADY STANLY'	36" HT.	POT OR B&B
LITTLE QUICK FIRE' HYDRANGEA	HYDRANGEA PANICULATA 'LITTLE QUI	36" HT.	POT OR B&B
LIMELIGHT' HYDRANGEA	HYDRANGEA PANCULATA 'LIMELIGHT'	36" HT.	
SKY PENCIL' HOLY	LLEX CRENATA 'SKY PENCIL'	36" HT.	POT OR B&B
BLUSHING KNOCK OUT' ROSE	ROSA SP. 'BLUSHING KNOW OUT'	36" HT.	POT OR B&B
LITTLE PRINCESS' SPIREA	SPIREA JAPONICA LITTLE PRINCESS'	36" HT.	POT OR B&B
BLUE MUFFIN' VIBURNUM	VIBURNUM DENTATUM 'BLUE MUFFIN'	36" HT.	POT OR B&B
SHASTA' VIBURNUM	VIBURNUM PLICATUM TOMEN. 'SHASTA	36" HT.	POT OR B&B
HAMELIN' FOUNTAIN GRAS	PENNISETUM ALOPECUROIDES 'HAMELI	#3 POT	

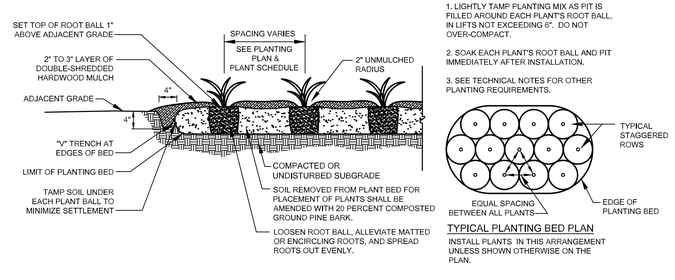
REGEN					
SYMBOL	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**MIN SIZE AT PLANTING**	**PLANTING SPACING AND NOTES:**
JVI	40	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	8' HT	POT OR B&B, PLANT 10' ON CENTER
PPU	35	PICEA PUNGENS	BLUE SPRUCE	8' HT	B&B, PLANT 10' ON CENTER
PSF	36	PINUS STROBUS 'FASTIGIATA'	COLUMNAR WHITE PINE	8' HT	B&B, PLANT 10' ON CENTER
TON	40	THUJA OCCIDENTALIS 'NIGRA'	DARK AMERICAN ARBORVITAE	8' HT	POT OR B&B, PLANT 10' ON CENTER
EVERGREEN TREES & LARGE SHRUBS FOR SCREENING					
SYMBOL	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**MIN SIZE AT PLANTING**	**PLANTING SPACING AND NOTES:**
AF	-	FREEMAN' MAPLE	ACER FREEMANII	2-1/2" CAL.	POT OR B&B
AG	-	PAPERBARK MAPLE	ACER GRISEUM	2-1/2" CAL.	POT OR B&B
CB	-	EUROPEAN HORNBEAM	CARPINUS BETULA	2-1/2" CAL.	POT OR B&B
CC	-	TURKISH FILBERT	CORYLUS BETULA	2-1/2" CAL.	POT OR B&B
CK	-	CHEROKEE BRAVE' DOGWOOD	CORNUS FLORIDA 'CHEROKEE BRAVE'	2-1/2" CAL.	POT OR B&B
CP	-	WASHINGTON HWTHORN	CRATAEGUS PHAENOPYRUM	2-1/2" CAL.	POT OR B&B
CR	-	FOREST PANSY'	CERCIS CANADENSIS 'FOREST PANSY'	2-1/2" CAL.	POT OR B&B
GT	-	THORNLESS HONEYLOCUST	GLEDITSIA TRIACANTHUS	2-1/2" CAL.	POT OR B&B
PC	-	REDSPIRE' PEAR	PRYUS CALLERYANA 'REDSPIRE'	2-1/2" CAL.	POT OR B&B
PG	-	WHITE SPRUCE	PICEA GLAUCA	8' HT.	
PP	-	PERSIAN PARROTIA	PARROTIA PERSICA	2-1/2" CAL.	POT OR B&B
PR	-	NEWPORT' PLUM TREE	PRUNUS CERISAFERA 'NEWPORT'	2-1/2" CAL.	POT OR B&B
PS	-	BLUE SPRUCE	PICEA PUNGENS	2-1/2" CAL.	POT OR B&B
QR	-	RED OAK	QUERCUS RUBRA	2-1/2" CAL.	POT OR B&B
SM	-	SNOWDRIFT' CRABAPPLE	MALUS SP. 'SNOW DRIFT'	2-1/2" CAL.	POT OR B&B
SP	-	JAPANESE STEWARTIA	STEWARTIA PSEUDOCAMELLIA	2-1/2" CAL.	POT OR B&B
TC	-	LITTLE LEAF LINDEN	TILIA CORDATA	2-1/2" CAL.	POT OR B&B

NOTES:
1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL.
3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4.) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.
6.) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED SOIL.
7.) SUBSTITUTE ARBORVITAE STAKING SYSTEM WHEN SPECIFIED.



TREE PLANTING

NOT TO SCALE



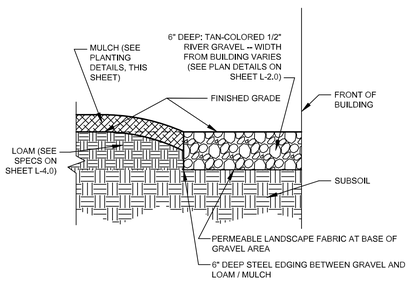
NOTES:
1. LIGHTLY TAMP PLANTING MIX AS PIT IS FILLED AROUND EACH PLANT'S ROOT BALL, IN LIFTS NOT EXCEEDING 6". DO NOT OVER-COMPACT.
2. SOAK EACH PLANT'S ROOT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
3. SEE TECHNICAL NOTES FOR OTHER PLANTING REQUIREMENTS.

TYPICAL PLANTING BED PLAN

INSTALL PLANTS IN THIS ARRANGEMENT UNLESS SHOWN OTHERWISE ON THE PLAN.

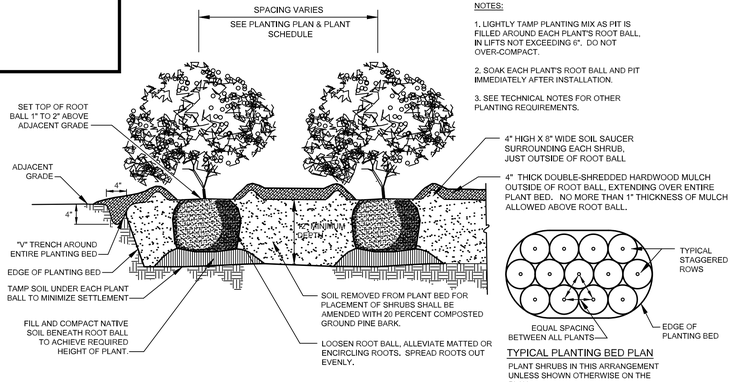
GROUNDCOVER & PERENNIAL PLANTING

NOT TO SCALE



GRAVEL EDGE

SECTION VIEW -- NOT TO SCALE



NOTES:
1. LIGHTLY TAMP PLANTING MIX AS PIT IS FILLED AROUND EACH PLANT'S ROOT BALL, IN LIFTS NOT EXCEEDING 6". DO NOT OVER-COMPACT.
2. SOAK EACH PLANT'S ROOT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
3. SEE TECHNICAL NOTES FOR OTHER PLANTING REQUIREMENTS.

TYPICAL PLANTING BED PLAN

PLANT SHRUBS IN THIS ARRANGEMENT UNLESS SHOWN OTHERWISE ON THE PLAN.

SHRUB PLANTING

NOT TO SCALE

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RESIDENTIAL DEVELOPMENT
#0 ASHWORTH DRIVE & #191 SOUTHBRIDGE ROAD
ASSESSOR'S MAP 3 LOT A05 AND MAP 6 LOT A01
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CAD FILE	H:\1001D...\DWG\PERMIT\1001D-SP.DWG
PLAN NO.	L-458

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)
1 inch = 80 feet

SHEET TITLE

LANDSCAPE PLAN AND DETAILS

SHEET 5 OF 5

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.
C-9.4

H:_PROJECTS\OXFORD\1001D-OXFORD-ASHWORTH HILLS\DWG\PERMIT\1001D-SP.DWG 11-18-24 1:36:51 PM - LAYOUT C9.4-LS DETAILS

MASS STATE PLANE

SOUTHBRIDGE ROAD
ROUTE 90

PROPOSED PHASING LEGEND

PHASE 1		86 UNITS
PHASE 2		54 UNITS
PHASE 3		78 UNITS
PHASE 4		52 UNITS + CLUBHOUSE
PHASE 5		50 UNITS

PHASE 3

PHASE 2

PHASE 1

PHASE 1

PHASE 4

PHASE 5

BASIN#8

BASIN#3

BASIN#2

BASIN#1

BASIN#4

BASIN#5

BASIN#6

BASIN#7

EXISTING BASIN

TOWN OF AUBURN

TOWN OF OXFORD

MASSACHUSETTS TURNPIKE
INTERSTATE ROUTE 90

ASHWORTH DRIVE

THAYER POND

TURNING POINT ENGINEERING
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PLAN NO.	L-458

GRAPHIC SCALE

200 0 100 200 400
(IN FEET)
1 inch = 200 feet

SHEET TITLE

PROPOSED PHASING PLAN

SHEET 1 OF 1

COMMONWEALTH OF MASSACHUSETTS
JAMES A. BERNARDINO
No. 41717
REGISTERED PROFESSIONAL ENGINEER

SHEET NO.

C-10.0

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