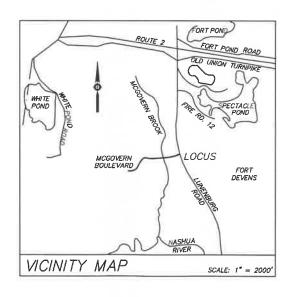


MCGOVERN BOULEVARD

PHASE II: ROADWAY CONSTRUCTION
IN
LANCASTER, MASSACHUSETTS
NOVEMBER 24, 2020
REVISIONS THROUGH FEBRUARY 25, 2021



APPLICANT:

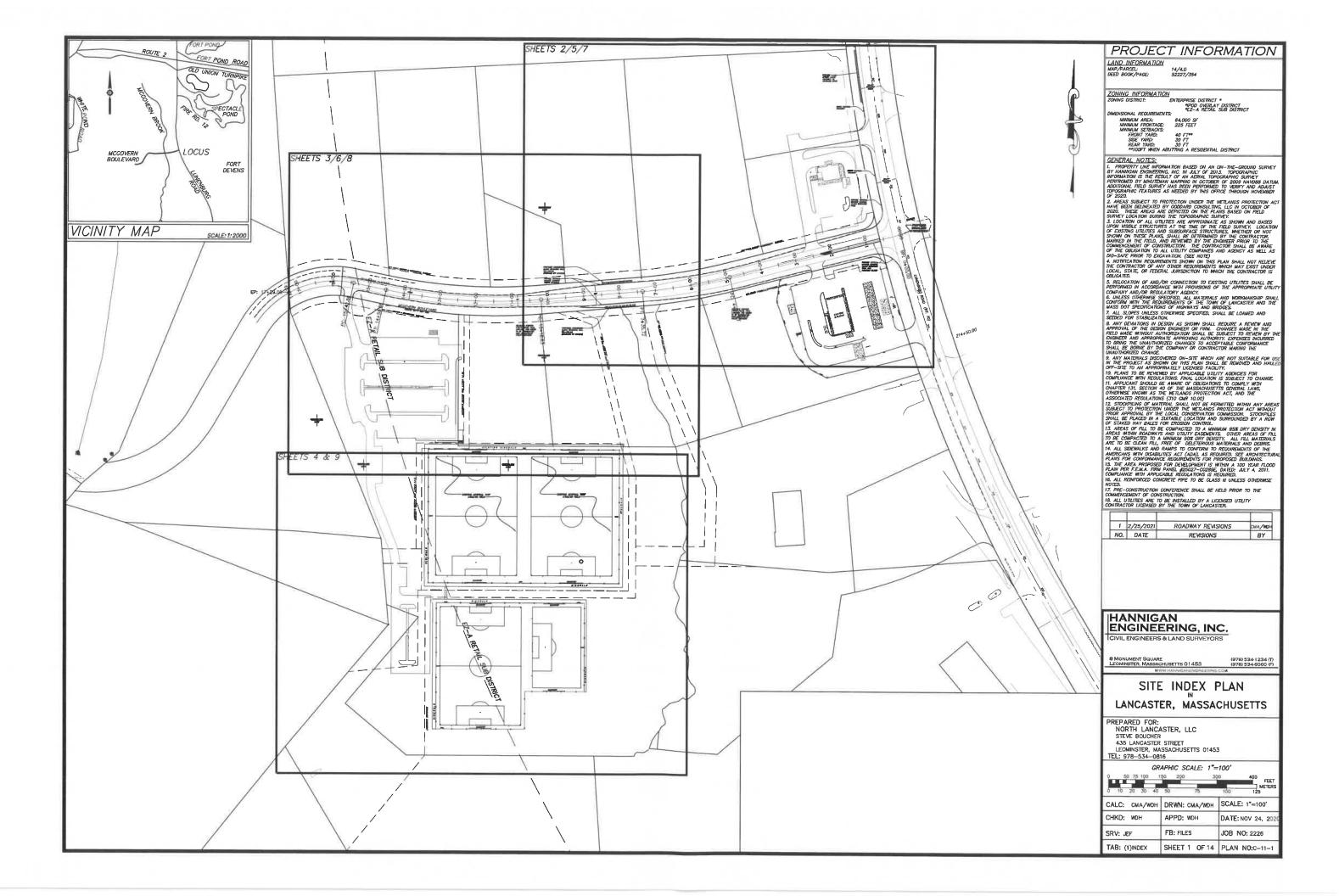
NORTH LANCASTER, LLC STEVE BOUCHER 435 LANCASTER STREET LEOMINSTER, MASSACHUSETTS 01453

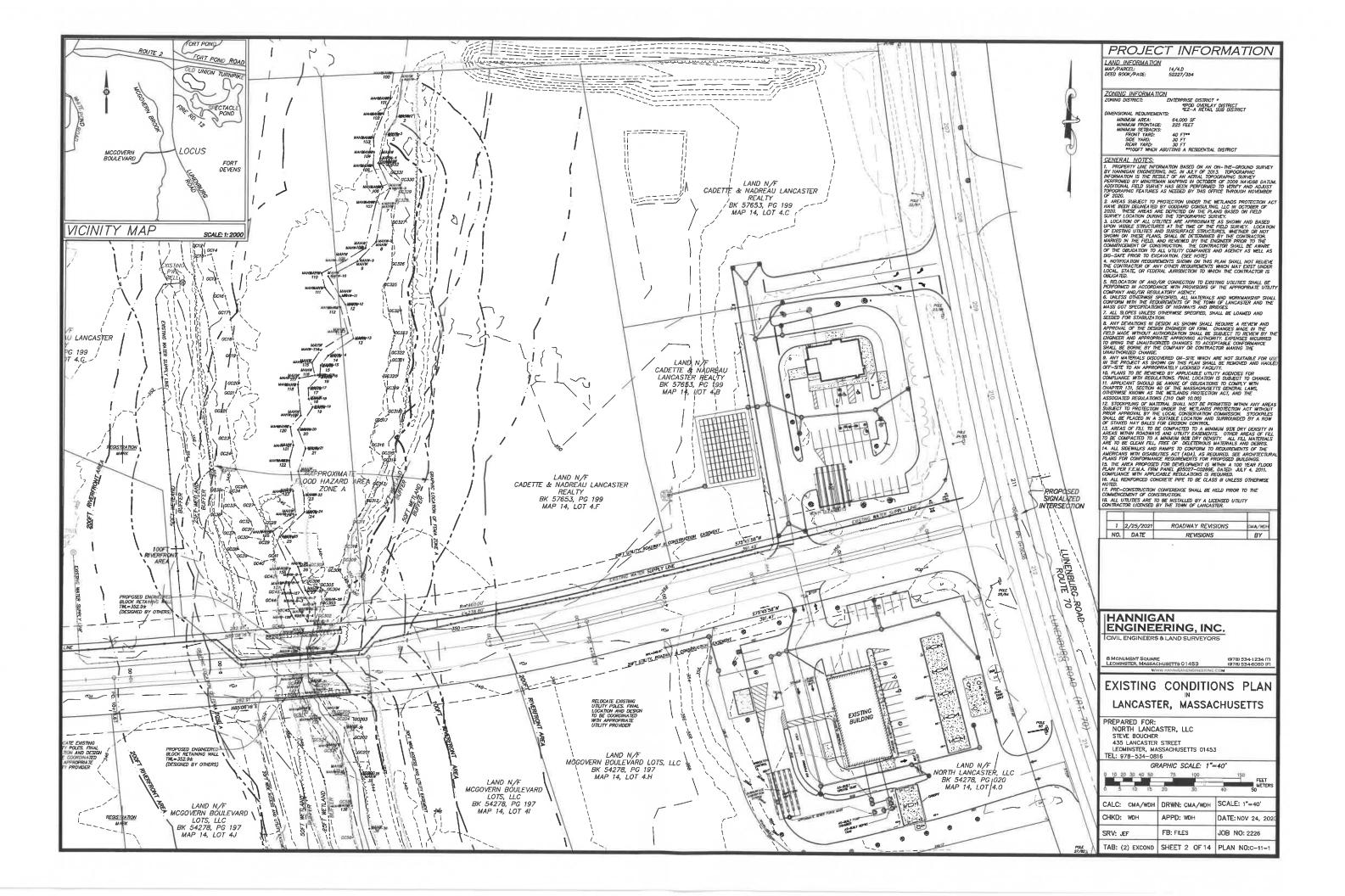
CIVIL ENGINEER & LAND SURVEYOR:

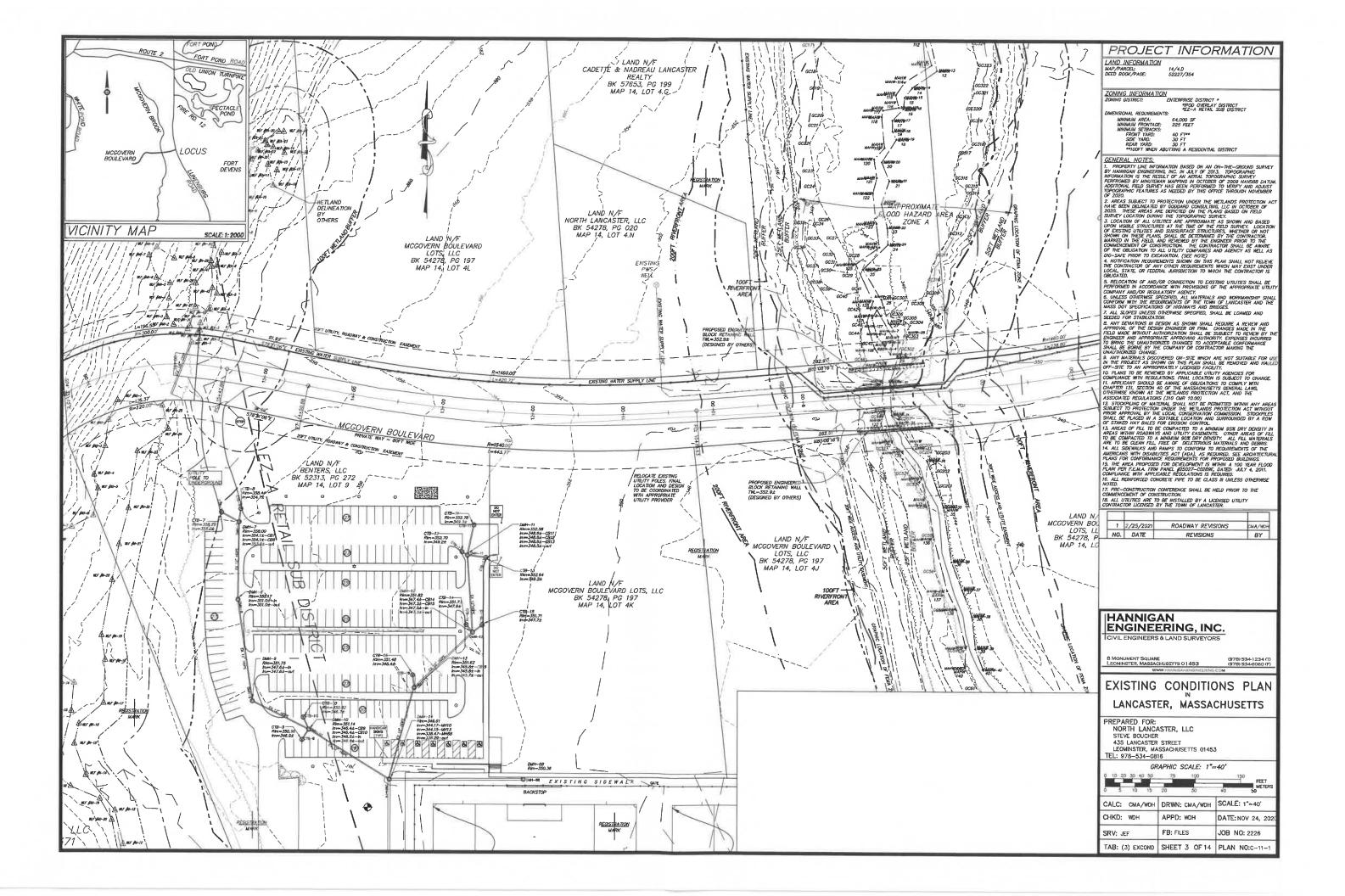
HANNIGAN ENGINEERING, INC. 8 MONUMENT SQUARE LEOMINSTER, MASSACHUSETTS 01453 TEL: (978) 534-1234

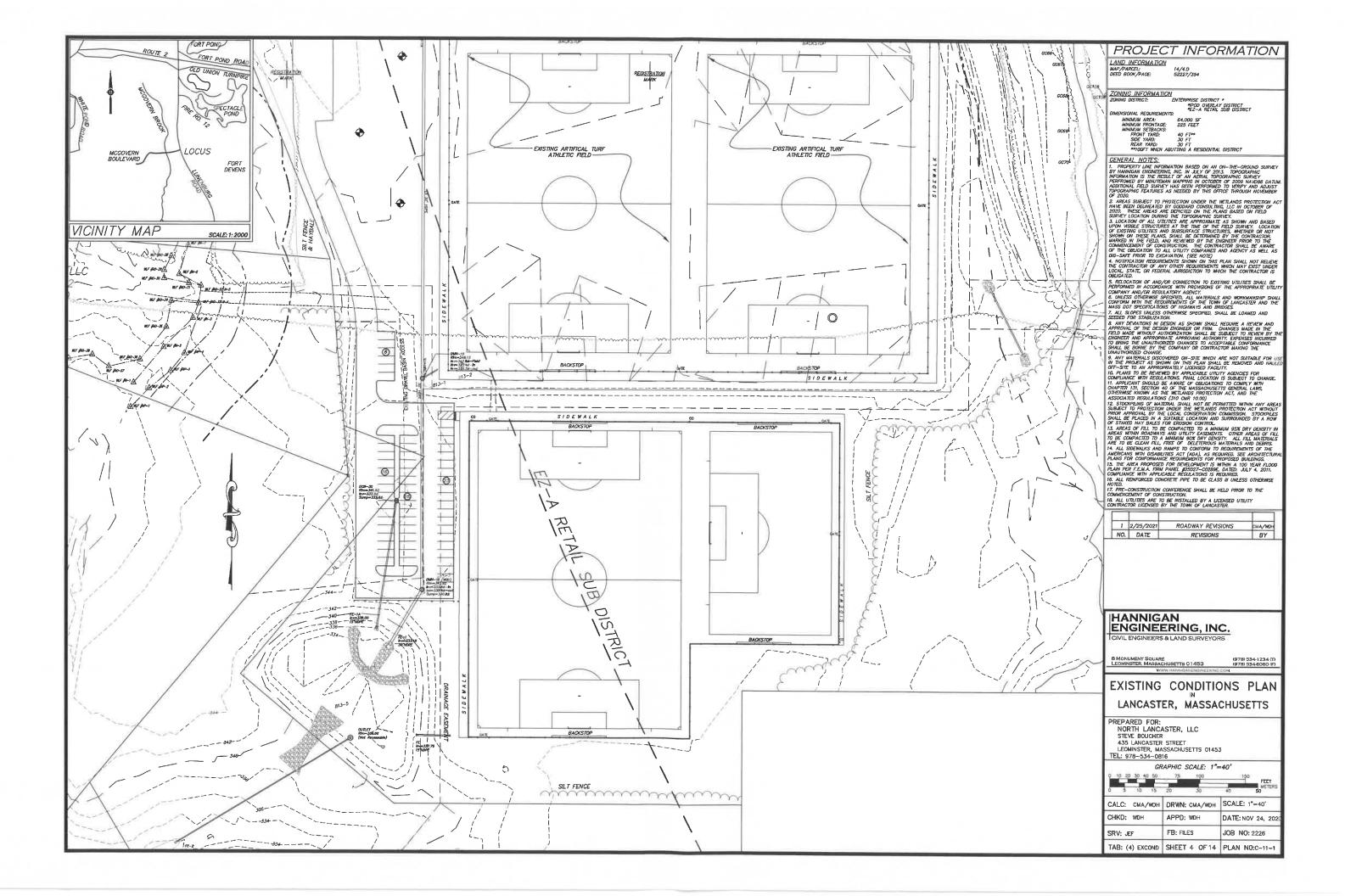
PLAN INDEX

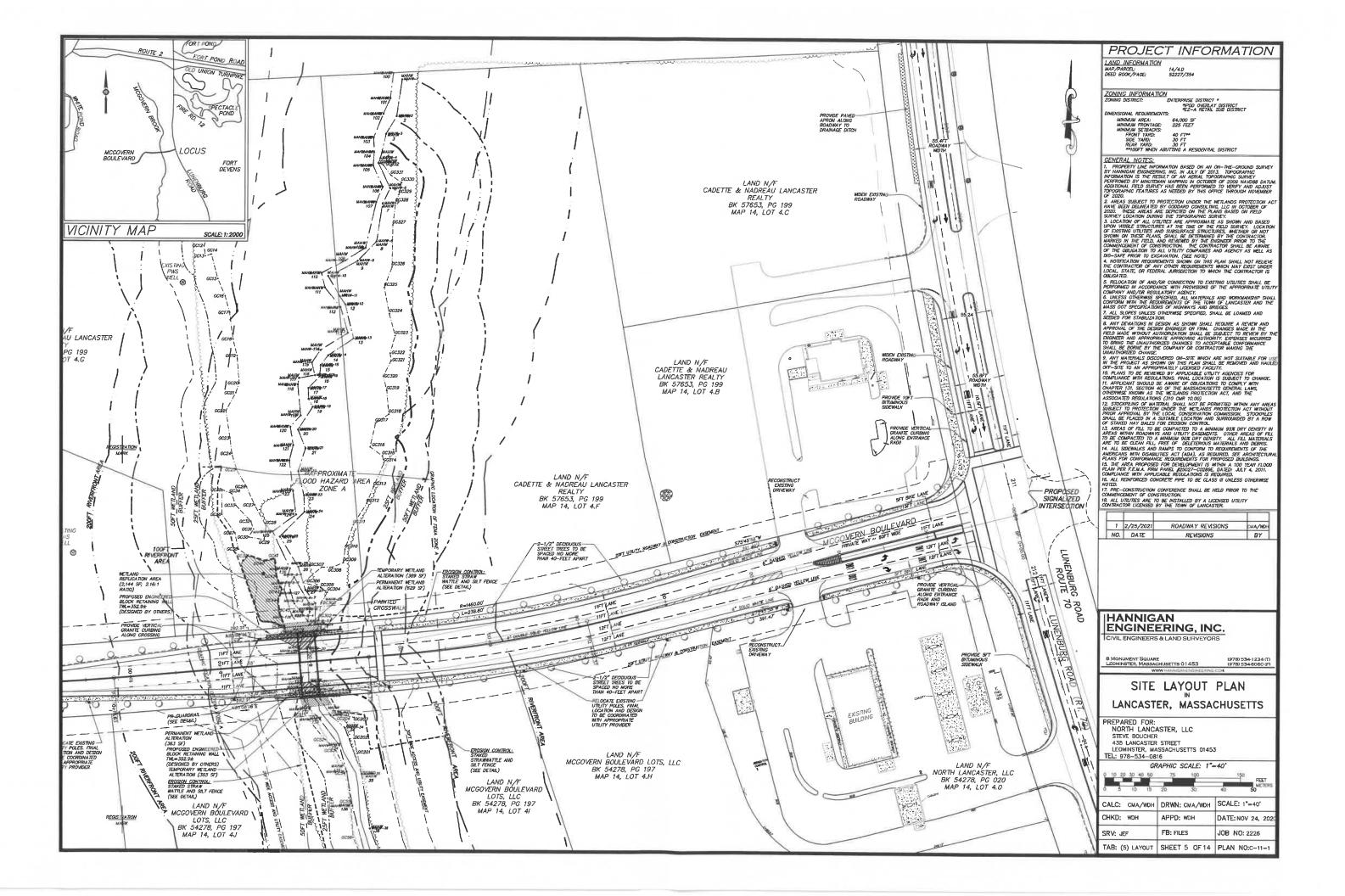
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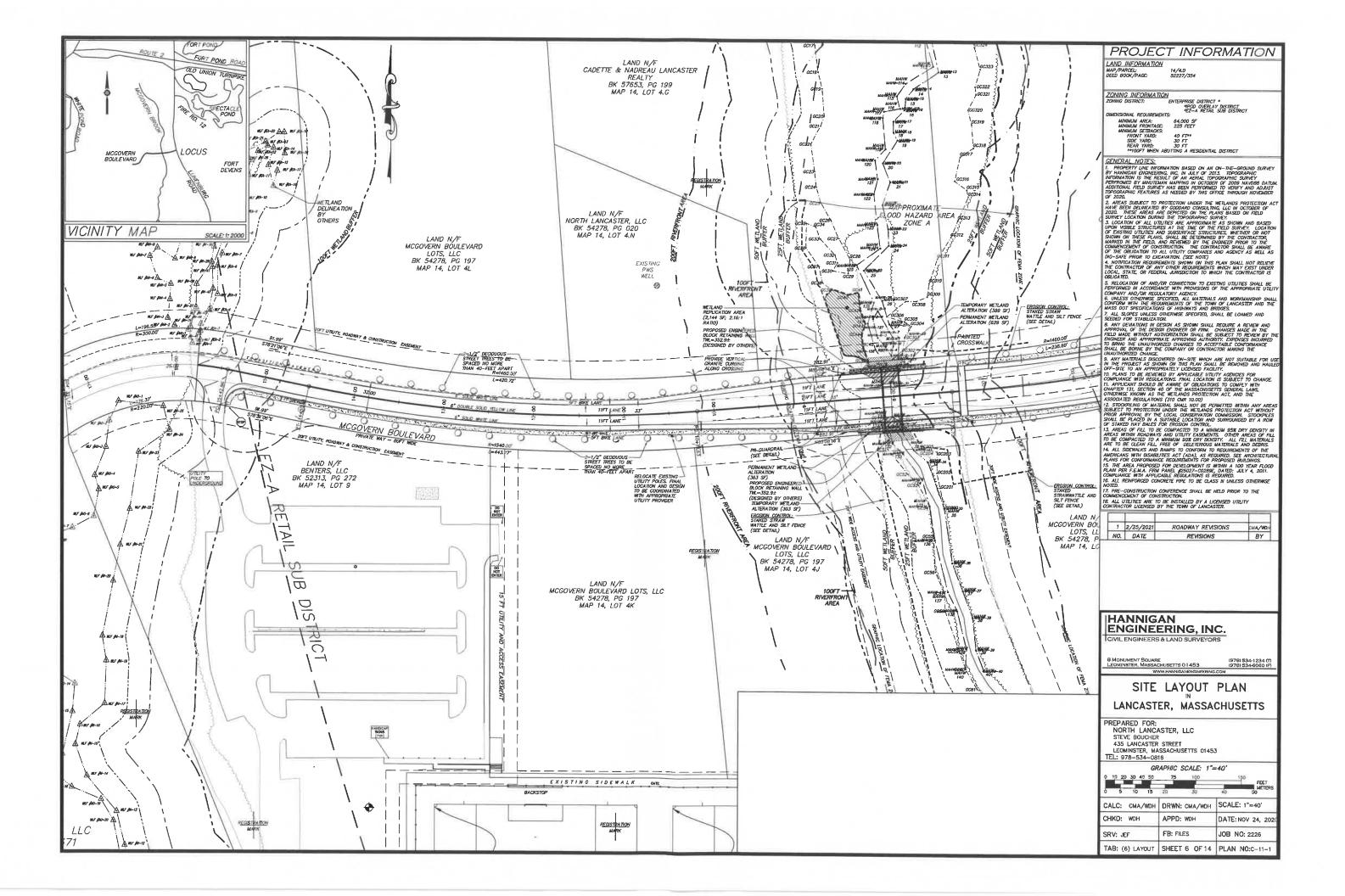


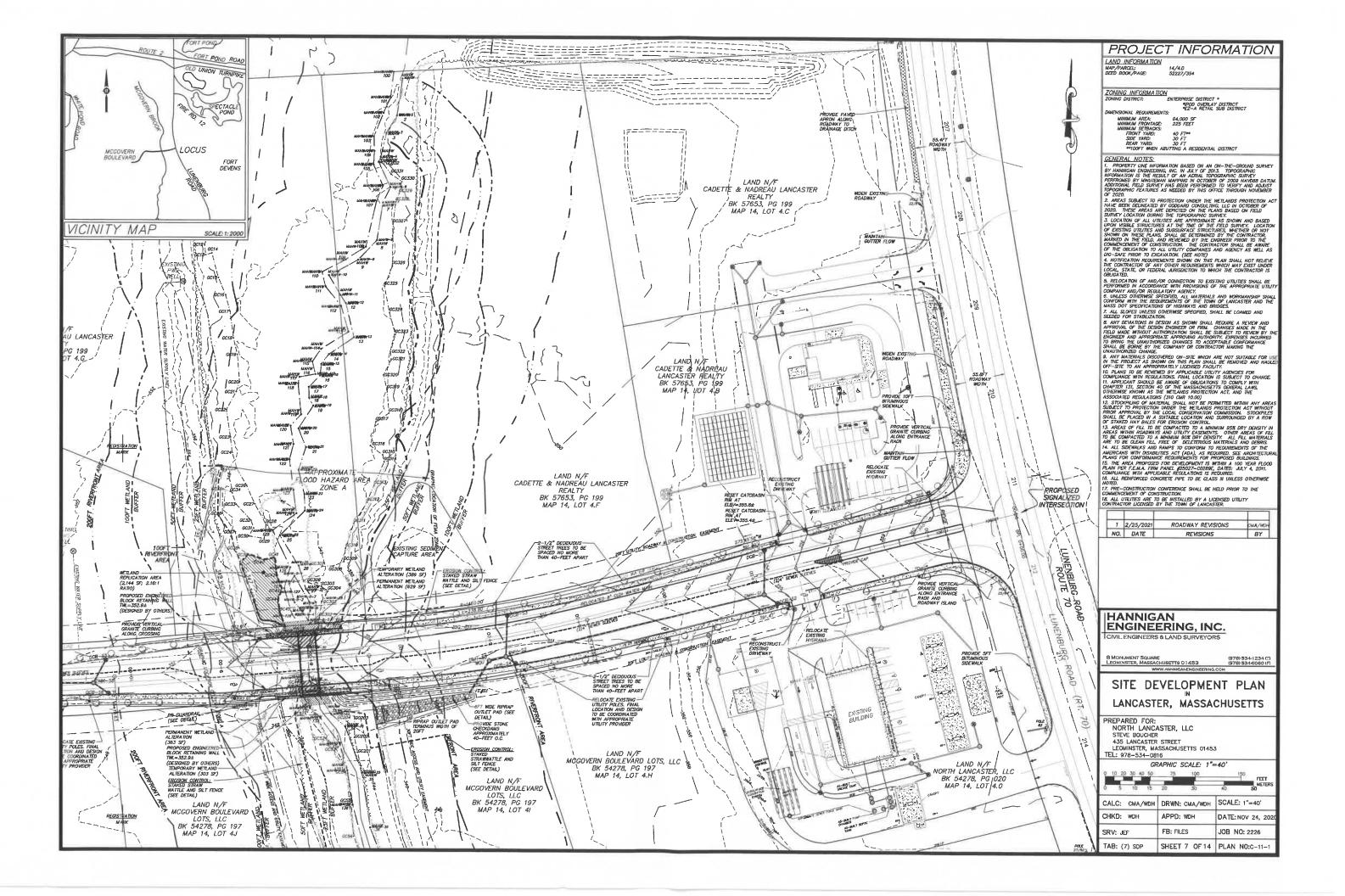


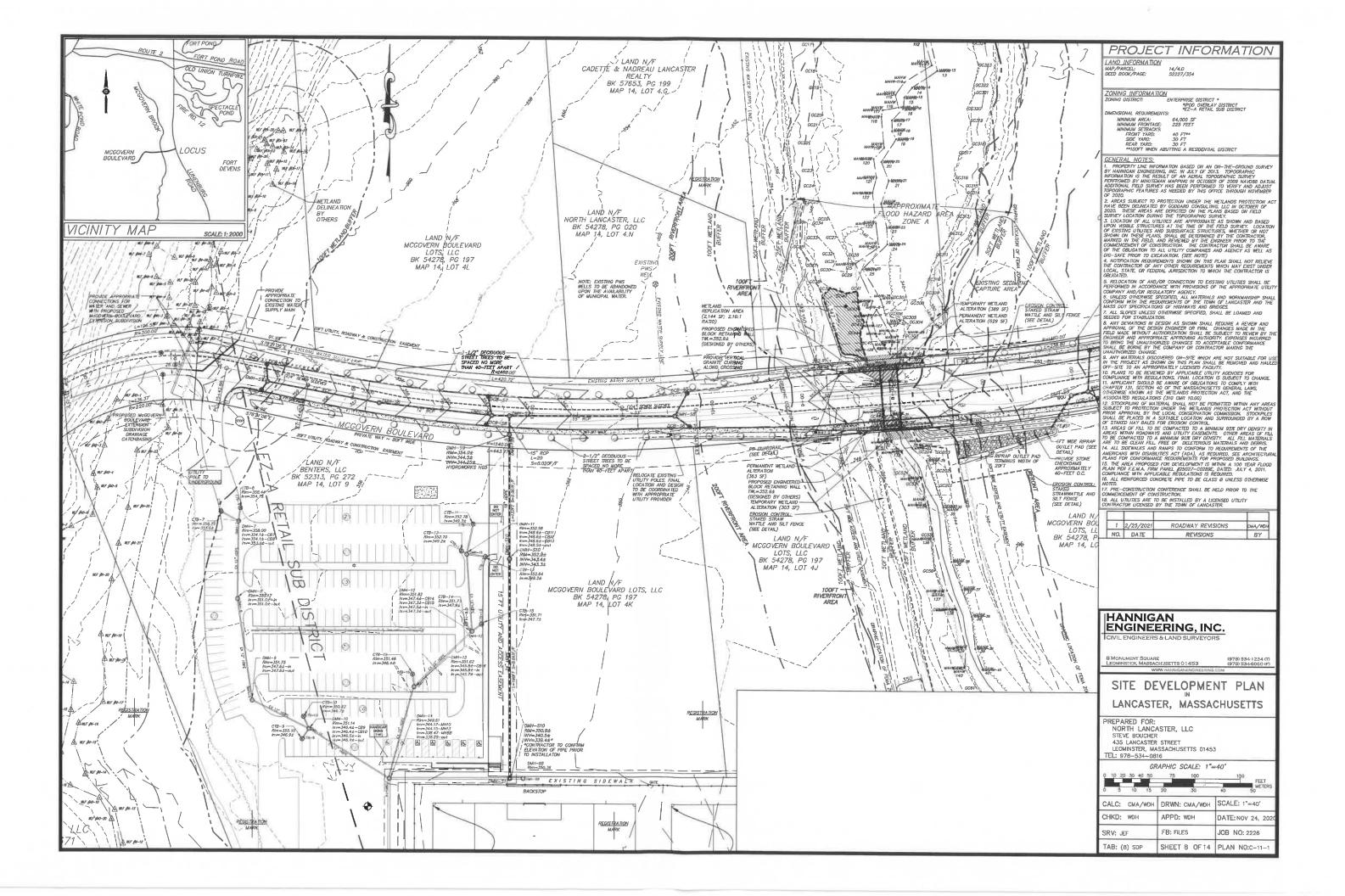


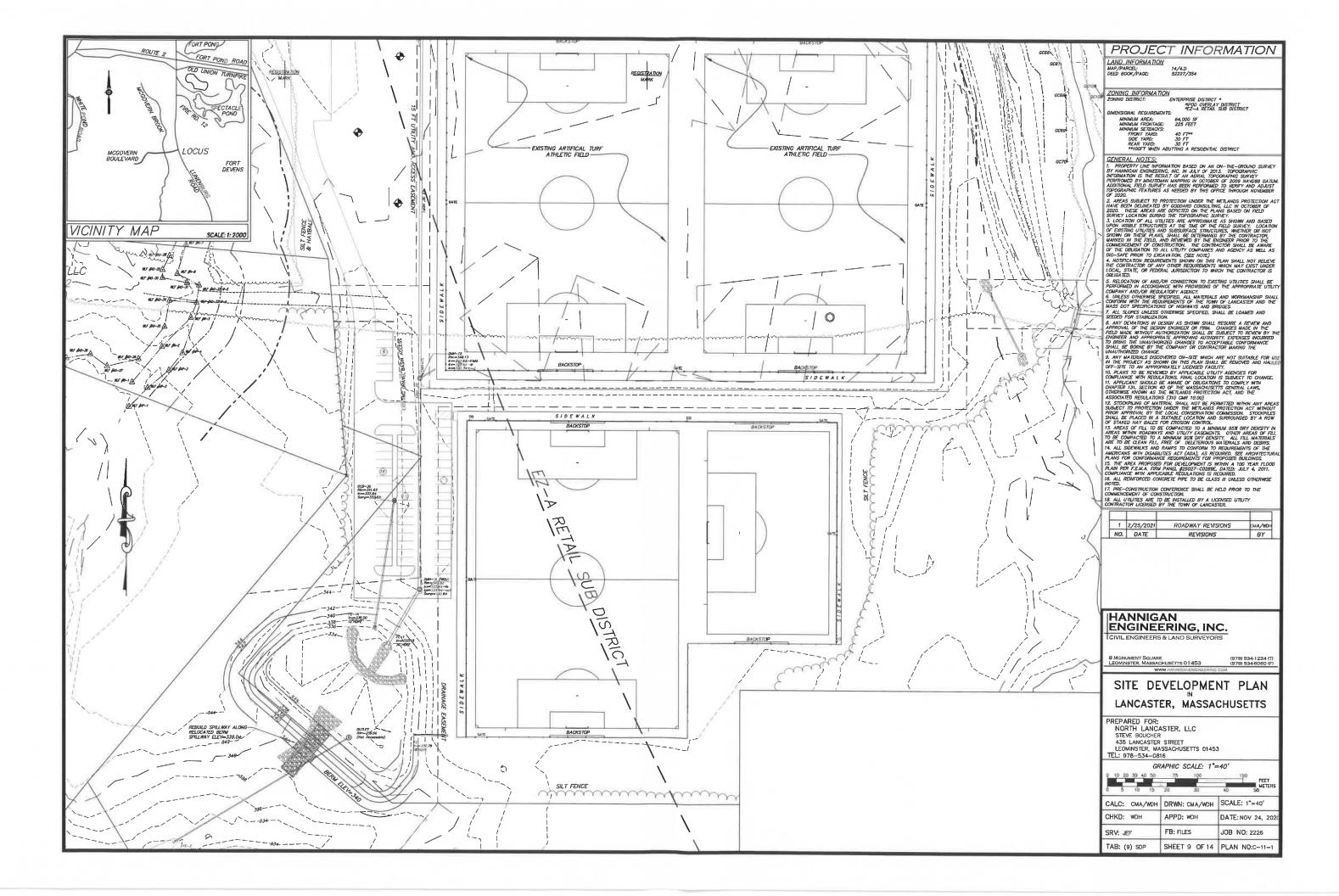


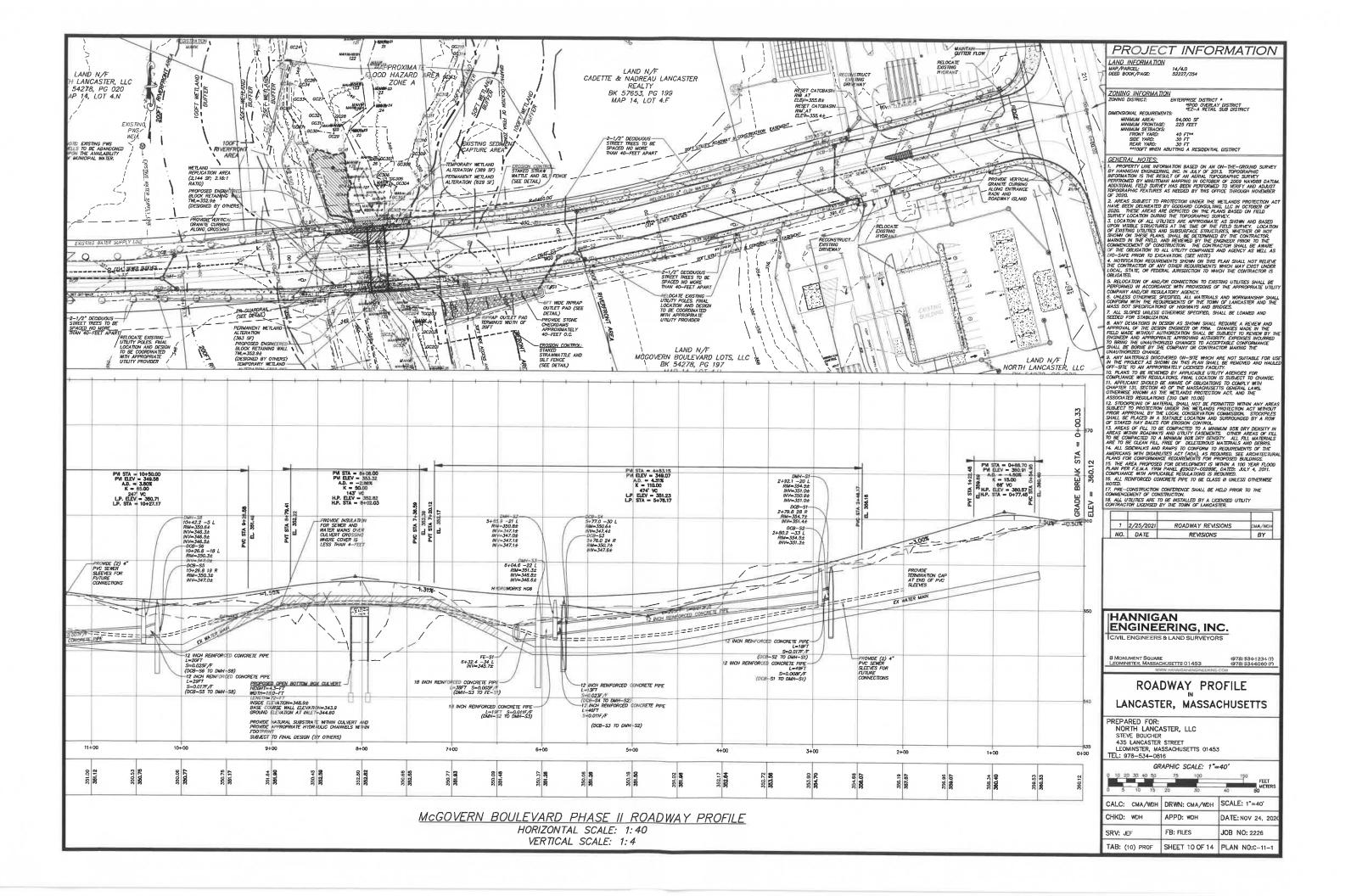


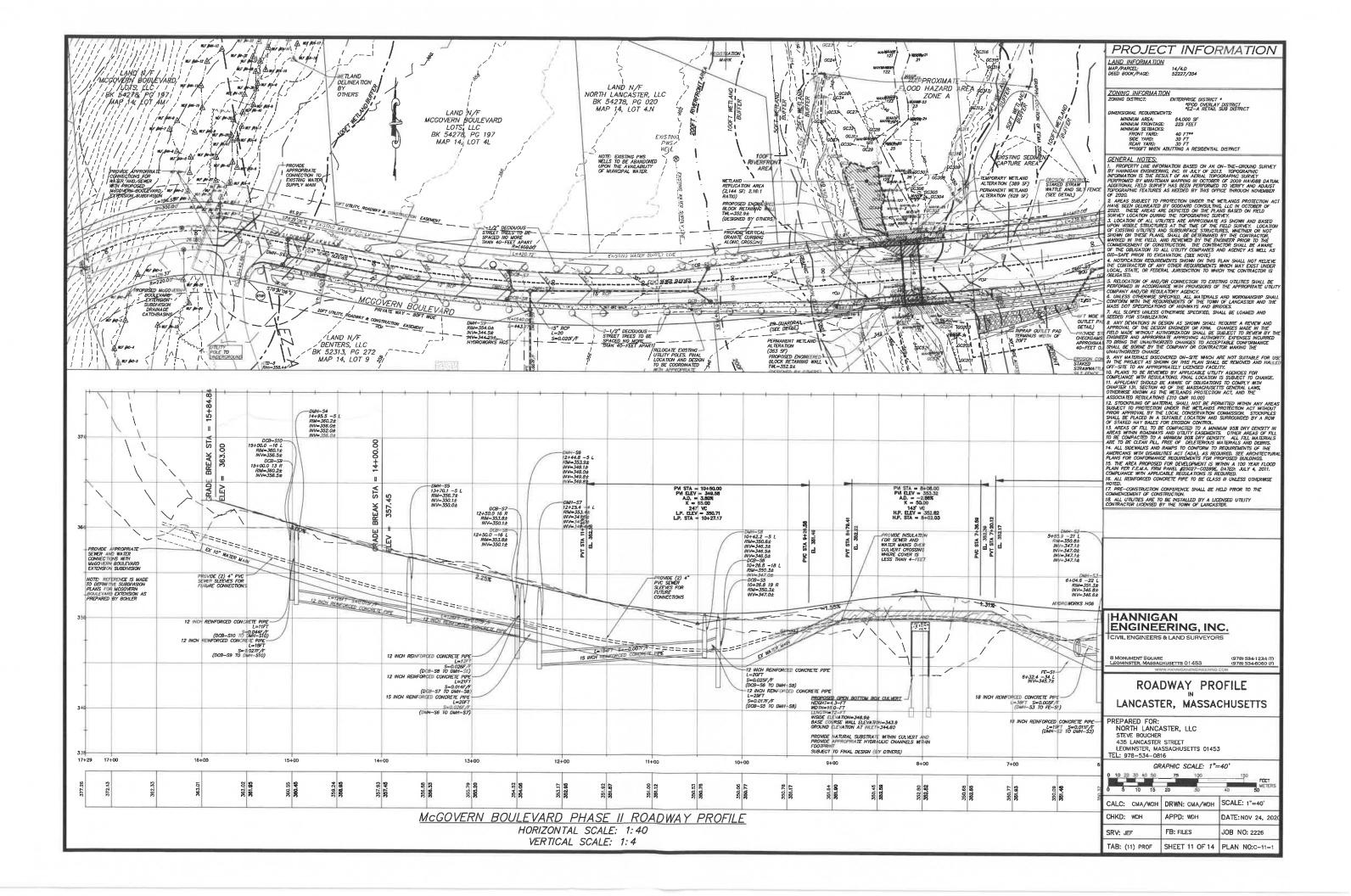












EROSION & SEDIMENTATION CONTROL PLAN

GENERAL:

1. THE PURPOSE OF THIS PLAN IS TO PRESENT A PREVENTIVE METHOD OF CONSTRUCTION TO MINIMIZE THE MEPACT OF THE CONSTRUCTION ACTIVITIES UPON METLAND AND OTHER SENSITIVE AREAS. THE DATA CONTAINED ON THIS PLAN IS INTENDED TO SUPPLEMENT THE DEVELOPER

CUNITACTUR.

2. THE CONTRACTOR IS TO BE AWARE OF THE REQUIREMENTS AND OBJICATIONS TO COURTY WITH CHAPTER 133, SECTION 40 OF THE MASSACHISETS GENERAL LAWS, OTHERWISE KNOWN AS THE WEILANDS PROTECTION ACT, AND ITS ASSOCIATED RECULATIONS (3TO CUR 10.00). CERTIAN PERMITS IN THE FORM OF AN OPERE OF CONDITIONS, OR OTHER FORMAT, MAY BE REQUIRED FOR THE CONSTRUCTION AS DEPICTED ONLY THIS PLANT. HESE PERMITS SHALL BE REVIEWED AND ADVIEND THE CONTRACTOR SHOULD THE CONTRACTOR SHALL ALSO MAINTAIN COPIES OF ALL PERMITS ON SITE AT ALL TIMES.

AS INCLUMES.

IF CHANGES IN THE PROJECT ARE REQUIRED DUE TO FIELD CONDITIONS THE DEVELOPER/CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER FOR REVIEW OF THESE CONDITIONS. UPON REVIEW, AND PRIOR TO THE IMPLEMENTATION OF ANY CHANGE, THE CONTRACTOR AND THE ENGINEER SHALL MEET MITH THE APPROPRIATE LOCAL AND/OR STATE OFFICIAL, OR ITS AGENT, TO DETERMINE IN THE CHANGE REQUIRES

4. ALTERATION AND/OR DESTRUCTION OF METLAND AREAS MITHOUT PRIOR CONSENT OF THE CONSERVATION COMMISSION IS PROMISITED SILTATION PLUMES LILLED TOSICHARGES, OR INALDERITANT ALTERATION SHALL BE CONSIDERED AS ACTIVITIES NOT PERMITTED BY THE ORDER AND SHALL BE REPORTED TO THE CONSERVATION COMMISSION ALONG WITH THE PROPOSED MITIGATIVE MEASURES.

5. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE EROSION AND SEDMENT CONTROL BURNER SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL BURNER UNTIL ALL WORK IS COMPLETE. AND ALL AREAS HAVE BEEN STABILIZED. THE REMOVAL OF SEDMENT CONTROL DEVOES ALL BE ONLY UPON THE APPROVAL OF THE CONSERVATION COMMISSION.

6. EROSION AND SEDIMENTATION CONTROL DEVICES, SUCH AS CHECK DAMS, SEDIMENT BASINS, ETC. ARE TO BE INSTALLED AS SHOWN ON THE SITE DEVELOPMENT PLANS WITH ASSOCIATED DETAILS, AS APPROPRIATE.

7. CONSTRUCTION OPERATIONS SHALL NOT CAUSE NOTICEABLE SEDMENTATION PLUMES TO OCCUR ON OR SURROUNDING THE PROJECT. SHOULD SEDMENT EXTEND SERVICID THE ENGISION CONTROL BARRIERS, THE CONTRACTOR STALL STOP WORK AND INSTALL ADDITIONAL MITIGATION MEASURES TO PREVENT FURTHER SEDMENTATION.

8. NO MATERIAL SUBJECT TO EROSION SHALL BE STOCKPILED OVERNICH! WITHIN 100 FEET OF ANY WETLAND AREAS WITHOUT PROPER EROSION AND SEDMENTATION DEVICES IN PLACE.

9. EQUIPMENT SHALL NOT BE PARKED WITHIN WETLAND OR BUFFER AREAS EXCEPT DURING ACTUAL OPERATIONS REQUIRING SAID EQUIPMENT.

10. ACCUMULATED SEDIMENT ALONG EROSION CONTROL BARRIERS SHALL BE PERIODICALLY REMOVED AND DISPOSED OF BY THE CONTRACTOR AS REQUIRED BY THE CONSERVATION COMMISSION OR AS DIRECTED BY THE ENGINEER.

EROSION CONTROL METHODS:

1. IT IS OF GREAT IMPORTANCE THAT CONCENTRATION OF RUNOFF BE AVOIDED IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENT.

2. THE PRIMARY EROSION CONTROL METHOD TO BE UTILIZED IS TO LIMIT THE AREA OF DISTURBANCE DURING CONSTRUCTION ACTIVITIES. THIS IS ACCOMPLISHED BY PROMP STABILIZED OF DISTURBED AREAS UPON COMPLETION OF SEQUENCES OF CONSTRUCTION.

DEMARCATION OF SENSITIVE AREAS:

1. IT IS RECOMMEND THAT BARRIERS BE PLACED ON THE STIE TO CONTROL THE LIMITS OF THE DISTURBANCE. AS AN EXAMPLE, HAY BALE BARRIERS PROVIDE SUCH DELARGATION AND OTHER METHODS SUCH AS LOG BARRIERS, ROPE WITH FLAGGING, ETC. MAY BE UTILIZED.

CARE SHOULD BE TAKEN IN THE OPERATION OF EQUIPMENT, SUCH THAT ONLY THE MINIMUM AREA NEEDED TO BE ALTERED IS DISTURBED.

1. ACCESS TO THE SITE SHALL BE MADE IN THE AREA OF A PERMANENT DRIVEWAY OR ROADWAY UNLESS DOING SO WOULD RESULT IN A TRAFFIC HAZARO.

2. AN AREA OF CRUSHED STONE SHALL BE PLACED AT THE DRIVEWAY ENTRANCE TO INSTITUTE THAT MUD IS NOT TRACED ONTO THE EXISTING ROAD (SEE CONSTRUCTION ENTRANCE DETAIL). IF MUD IS MADVERTENTLY TRACKED ONTO THE ROAD, IT SHOULD BE PROMPTLY REMOVED.

3. LABORERS VEHICLES SHALL BE PARKED IN A DESIGNATED AREA AS TO MINIMIZE DISTURBED SURFACES AND TO INSURE THAT RUTS ARE NOT CREATED AND WHICH COULD CARRY WATER TO A WETLAND OR OTHER SENSITIVE AREA.

ORDERLY CONSTRUCTION PROCEDURES:

THE CONTRACTOR SHALL PERFORM SITE CONSTRUCTION IN A MANNER WHICH WILL INSURE THE STABILIZATION OF AREAS IN PROXIMITY OF OR TRIBUTARY TO WETLAND AREAS AS SOON AS POSSIBLE.

2. EROSION CONTROL DEVICES SUCH AS HAY BALE BARRIERS, SLT FENCES AND MULCH SHALL BE BROUGHT TO THE SITE AND STOCKPILED PRIOR TO INITIATING CONSTRUCTION.

3. THE CONTRACTOR SHALL PROVIDE AREAS FOR THE TEMPORARY STORAGE OF CONSTRUCTION DEBRIS. CONSTRUCTION DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE FOR AN EXTENDED PERIOD OF TIME.

CLEARING:

1. LAND CLEARING SHALL BE PERFORMED IN PHASES CONSISTENT WITH ACTUAL CONSTRUCTION RECURRENENTS. FINAL LAND CLEARING SHALL BE LIMITED TO RETURN TO GRADE SLOPES.

2. TREES SHALL BE CUT AND STUMPS GROUND IN PLACE TO EXISTING GRADE TO MAINTAIN SOIL STABILIZATION.

3. BRUSH AND BRANCHES SHOULD BE CHIPPED AND UTILIZED FOR WOOD MULCH IF PRACTICAL.

4. VEHICLES UTILIZED IN THE CLEARING OPERATION SHOULD NOT TRAVERSE WETLANDS OR FLOMING BROOKS OR STREAMS WITHOUT PRIOR APPROVAL FROM THE LOCAL CONSERVATION COMMISSION OR AGENT. GRUBBING AND STRIPPING:

1. TOP SOIL SHALL BE RETAINED FOR LANDSCAPING PURPOSES. GRUBBING AND STRIPPING OF SLOPES LEADING TO WETLAND AREAS SHOULD NOT BE UNDERTAKEN DURING PERIODS OF INTENSE RAINFALL.

3. TOP SOIL STOCKPILE LOCATIONS ARE DEPICTED ON THE SITE DEVELOPMENT PLAN, THE EROSIGN CONTROL PLAN, AND/OR THE CONSTRUCTION PHASING PLAN AND SHALL BE ADHERED TO.

4. WHEN WORKING IN THE VICINITY OF WETLANDS, TOP SOIL SATURATED WITH WATER SHALL BE REMOVED, AND CONTAINED PRIOR TO BEING USED 5. AREAS LEADING TO WETLANDS SHALL HAVE HAY BALE BARRIERS INSTALLED ACROSS THEM IN ARCS POINTING DOWN THE HILL AT INTERVALS SUFFICIENT TO MITIGATE RUNOFF CARRYING SEDIMENT.

8. DURING PERIODS OF INTENSE RAINFALL, OR IF THE PROJECT IS TO BE LEFT FOR A PERIOD OF TIME, CONSIDERATION SHOULD BE GIVEN TO SUPPLEMENT HAY BALE BARRIERS WITH EITHER CRUSHED STONE OR ARMORED BARRIERS. CONSIDERATION MAY ALSO BE GIVEN TO DIVERTING RINGEF INTO EMPORARY SOMEWITHING ROLFIED, AREAS.

7. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.

ROUGH GRADING:

1. THE ROUGH GRADING OF THE ROADWAY SHALL FOLLOW THE FILL AND EXCAVATION SEQUENCES, RESULTING IN SLOPES BEING MAINTAINED AWAY FROM METLANDS AND SENSITIVE AREAS AS MUCH IS PRACTICAL.

2. DURNIN THIS PROCESS THE EROSION POTENTIAL IS HIGH, SUFFICIENT EROSION FOTENTIAL IS HIGH, SUFFICIENT EROSION CONTROL BARRIERS SHOULD BE KEPT IN PROXIMITY TO THE WORK AREA TO ALLOW GUICK ACTION SHOULD EROSION BECKNE AN ISSUE AND TO INSURE THAT NO SEDIMENT REACHES WETLANDS OR OTHER SENSITIES AREAS.

3. IN AREAS OF CUT AND/OR FILL WHERE SLOPES COULD DIVERT WATER TOWARD WEILAND AREAS, DIVERSION TRENCHES AND/OR SWALES SHOULD BE CONSIDERED AND IMPLEMENTED TO DIVERT WATER AWAY FROM THESE AREAS.

4. STEEP SIDE SLOPES IN EXCAVATION OR FILL SHOULD BE AVOIDED. S. DISTURBED AREAS SHALL BE STRONLED BY LOADING AND SEEDING OR RIPRAPPED MANEDIAETY ATTER THE RINS) GRADE HARS BEEN MET. IF FINAL GRADING DEES NOT OCCUR DURING THE GROWING SEASON, THESE AREAS SHALL BE MUCKED BY HAY SECURED BY MEIGHTED SHOW FENCE, CHICKEN WIRE MESH OR JUTE NETTING WITH APPROPRIAE SECURING DEVICES.

6. A GROUND COVER SUFFICIENT TO RETAIN SOILS IN A STABILIZED CONDITION MUST BE PROVIDED WITHIN 14 WORKING DAYS, SEASON PERMITTING, ON ANY PORTION OF THE TRACT UPON WHICH FURTHER ACTIVE CONSTRUCTION IS NOT BEING UNDERTAIREN.

DRAINAGE:

IF DRAINAGE PIPES OR SWALES ARE TO BE INSTALLED, THEY SHALL BE CONSTRUCTED FROM DOWNSTREAM UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF OUTFALL RIPRAP AND OTHER MITIGATIVE MEASURES SHOWN ON THE PLAN.

2. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, HAY BALES OR OTHER SUITABLE METHODS TO ENTRAP SEDIMENT SHALL BE PLACED DOWNSTREAM.

3. THE TOE OF EMBANKMENTS SHALL BE STABILIZED IMMEDIATELY, MULCHED AND TACKED DOWN BY SUITABLE MEANS.

4. IF THE PROPOSED ROADWAY IS NOT PAVED IMMEDIATELY AFTER THE INSTALLATION OF BRAINAGE STRUCTURES, HAY BALES SHALL BE PLACED TO PROTECT THE INTERRITY OF THE STRUCTURES.

BUILDING CONSTRUCTION: DURING THE CONSTRUCTION OF BUILDINGS, MATERIALS SHALL BE STOCKPILED IN A MANNER AS NOT TO DIVERT OR CONCENTRATE RUNOFF IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENT.

2. THE LOT SHOULD BE KEPT LITTER FREE. 3. NO FUELS, SOLVENTS, PAINTS, ETC. SHALL BE STORED ON SITE. THESE PRODUCTS SHALL BE REMOVED FROM THE SITE EACH EVENING AND RETURNED THE FOLLOWING DAY.

4. BURIAL OF MATERIALS OR CONSTRUCTION DEBRIS IS PROHIBITED. 5. PLASTERERS AND PAINTERS SHALL BE INFORMED THAT DISCHARGE OF LIQUIDS INTO A WETLAND OR RESOURCE AREA IS PROHIBITED. LANDSCAPING:

LANDSCAPING OF AREAS SHOULD OCCUR AS SOON AS POSSIBLE. 2. IF THE SEASON OR ADVERSE WEATHER CONDITIONS DO NOT PERMIT THE ESTABLISHMENT OF VEGETATION, TEMPORARY HAY MULCH, OR OTHER MEANS OF STABILIZATION SHALL BE PERFORMED. 3. USE OF HERBICIDES MAY BE SUBJECT TO OTHER REGULATIONS.

4. CARE SHOULD BE TAKEN WITH FERTILIZERS SUCH THAT THEY ARE NOT CARRIED TO A WETLAND OR SENSITIVE AREA.

5. TRUNKS OF TREES SHOULD NOT BE COVERED WITH MORE THAN TWO (2) INCHES OF SOIL 6. STUMPS SHALL BE GROUND DOWN INTO A WOOD MULCH AND UTILIZED OR REMOVED FROM THE SITE.

CREATION OF DETENTION BASIN:

THE DETENTION BASIN HAS BEEN PLACED AS A SEPARATE ITEM TO EMPHASIZE THE IMPORTANCE OF EROSION CONTROL DURING ITS

2. THE PRIMARY EROSION CONTROL METHOD FOR BASIN CONSTRUCTION, AS WELL AS FOR THE SITE IS THE RAPID STABILIZATION OF ALL SURFACES. SECONDARY IN IMPORTANCE IS THE CONCENTRATION OF RUNOFF BE AVOIDED IN ORDER TO PREVENT THE TRANSPORT OF SEDIMENT.

3. DURING CONSTRUCTION, THE FILL AND EXCAVATION SEQUENCES SHOWN ON THIS PLAN SHOULD BE UTILIZED. THES SEQUENCES REQUIRE THAT SLOPED AREAS LEFT FOR ANY PERIOD OF TIME HOT SLOPED TOWARDS THE WETLAND OR SENSITIVE AREA, BUT RATHER BACK INTO THE FILL MATERIAL.

4. THE BASIN BERM IS TO BE CONSTRUCTED BY EQUIPMENT WORKING ON STABLE MATERIAL ONLY. HAY BALES SHALL BE PLACED AT THE TOE OF SLOPE UNTIL SURFACES ARE STABILIZED.

5. NO EXCAVATION WITHIN THE BASIN SHALL COMMENCE UNTIL THE BERM IS IN PLACE.

6. CARE SHOULD BE TAKEN TO INSURE THAT ORGANIC MATERIAL REMOVED FROM THE BASIN AREA IS RESERVED FOR FINISH GRADING AND THE STABILIZATION OF DISTURBED AREAS.

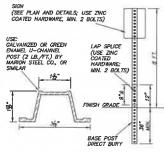
7. IF DEWATERING IS NECESSARY, PUMPING TO A SETTUNG BASIN SHALL BE PERMITTED IF SETTLING BASIN IS CONSTRUCTED, MAINTAINED AND OPERATED EPFECTIVELY.

8. AT NO TIME SHALL RUNOFF CARRYING SEDIMENT BE ALLOWED TO FLOW TO THE WETLANDS OR SENSITIVE AREAS.

9. THE WORK AREA SHALL REMAIN FREE OF LITTER AND DEBRIS AT ALL TIMES AND MONITORED ON A DAILY BASIS TO ENSURE COMPLIANCE. 10. ALL MATERIALS STOCKPILED SHALL BE LOCATED, MULCHED OR OTHERIMSE TREATED TO INSURE THAT MATERIALS CONTAINED, THEREIN, AREA NOT CARRIED INTO THE WETLANDS.

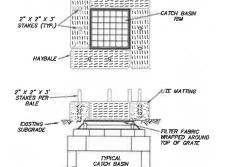
11. ANY MATERIALS BLOWN OR CARRIED BY WATER AWAY FROM THE CONSTRUCTION SITE OR INTO THE WETLAND AREAS SHALL BE PROMPTLY REMOVED AS REQUIRED BY THE LOCAL CONSERVATION COMMISSION.

12. A GEOTECHNICAL FILTER FABRIC SHALL BE PLACED OVER THE BASIN SUBDRAIN DURING CONSTRUCTION TO PREVENT SEDIMENT FROM ENTERING AND CLOGGING THE DRAIN. THE FABRIC SHALL BE REMOVED FOR BASIN PREPARATION FOR RIVAL STABILIZATION.

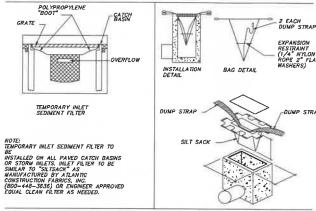


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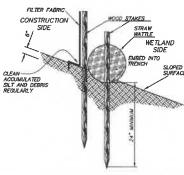
IOTES.
INSTALL HAY BALES FOR TEMPORARY SEDMENTATION CONTROL.
PERFORM BUILDING AND SITE CONSTRUCTION.
S. CLEAN OUT CATCH BASINS AND DRAINAGE.
RESTORE ALL DISTURBED AREAS.
S. LOBM AND SEED ALL DISTURBED AREAS.
S. LOBM AND SEED ALL DISTURBED AREAS.
6. REMOVE TEMPORARY EROSION CONTROL AFTER VEGETATION IS ESTABLISHED.



TEMPORARY ROADWAY SEDIMENT CONTROL



SILT SACK DETAIL NO SCALE



STRAW WATTLE DETAIL NO SCALE



STORMWATER OPERATION AND MAINTENANCE PLAN

THE FOLLOWING SHALL BE CONSIDERED THE OPERATION & MAINTENANCE PLAN (OMP) FOR THE STORMWATER COLLECTION FACILITY FOR THIS DEVELOPMENT.

I. STSTEM UMBERSHIP

THE SYSTEM SHALL INCLUDE THE DRAINAGE INFRASTRUCTURE AND ALL OF ITS COMPONENTS AS SHOWN ON THE SITE DEVELOPMENT

PLANS. THE SYSTEM SHALL ALSO INCLUDE THE PIPMS TO THE COMMECTION TO THE TOWN OF LANGASTER DRAINAGE SYSTEM. THE

STRUCTURES OF THE SYSTEM SHALL INCLUDE WANDLES, CATCH BASINS, AND OUTFALL SECONTROL STRUCTURES, AND SHALL BE

CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DETAILS AND THE APPROVED PLANS.

UPON THE COMPLETION OF CONSTRUCTION, THE DRAINAGE SYSTEM SHALL REMAIN THE PROPERTY OF HOMEOWNER ASSOCIATION AND INCLUDES RIGHTS AND RESPONSIBILITIES TO MAINTAIN, INSPECT, REPAIR, REPLACE, ETC., THE COMPONENTS OF THE DRAINAGE SYSTEM INCLUDING QUIFALL & CONTROL STRUCTURES.

II. RESPONSIBLE PARTIES
THE LAND OWNER SHALL BE CONSIDERED THE RESPONSIBLE PARTY FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER
MANAGEMENT SYSTEM. THE SYSTEM SHALL INCLUDE THE DRAINAGE INFRASTRUCTURE AND ALL OF ITS COMPONENTS WITHIN
DEVELOPMENT. THE LAND OWNER SHALL BE CONSIDERED THE RESPONSIBLE PARTY FOR THE OPERATION AND MAINTENANCE OF THE
DETENTION FACILITIES AND THE OUTFALL AREAS OF THE DRAINAGE SYSTEM.

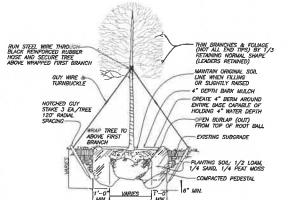
IIL INSPECTION & MAINTENANCE SCHEDULE
THE FOLLOWING MAINTENANCE SCHEDULE SHALL BE FOLLOWED IN ORDER TO MAINTAIN THE EFFECTIVENESS OF THE STORMWAITER
MANAGEMENT SYSTEM.

STRUCTURE TYPE	INSPECTION	MAINTENANCE	TASK
CATCH BASINS	QUARTERLY AND AT THE END OF END OF THE FOLIAGE AND SNOW REMOVAL SEASONS	QUARTERLY, OR WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH FROM THE BOTTOM OF THE INVERT OF THE LOWEST PIPE	REMOVE SEDIMENT FROM SUMPS
HYDROWORKS -HYDROGUARD	ANNUALLY IN THE SPRING	ANNUALLY IN THE SPRING	REMOVE SEDIMENT FROM SUMPS
RIP RAP APRONS	PMCE A YEAR	EVERY 10 YEARS	CLEAN & ADD STONE
SPILLWAYS	TWICE A YEAR	EVERY 10 YEARS	REMOVE DEBRIS & ADD STONE
DETENTION BASINS	MONTHLY (MAY-OCT)	MONTHLY (MAY-OCT)	MOW GRASS AREAS & REMOVE DEBRIS REMOVE SEDIMENT IF PRESENT

A MAJOR STORM EVENT IS DEFINED AS A STORM THAT IS EQUAL TO OR GREATER THAN THE 2—YEAR, 24 HOUR STORM (THREE (3) INCHES IN A 24—HOUR PERIOD).

2. ANY SEDIMENTS AND HYDROCARBONS REMOVED DURING MAINTENANCE OF STORMMATER MANAGEMENT STISTEM SHOULD BE TRANSPORTED OFF SITE FOR DISPOSAL. DISPOSAL OF SEDIMENTS AND HYDROCARBONS SHALL BE DONE IM ACCORDANCE MITH ALL APPLICABLE LAND.

3. IT IS RECOMMEDED THAT ICE REMOVAL/PREVENTION METHODS LIMIT OR AVOID THE USE OF SAND PRODUCTS ON THE PROJECT.



EXCAVATION SEQUENCE

- LOAM AND SEED EXCAVATED AREAS AS SOON AS POSSIBLE

EXCAVATE TOWARDS
SENSITIVE AREA WITH FACE AS
SHOWN IN PHASE I WITH FINISH
BASE CRADES

LOAM AND SEED & MULCH BERN AREA

PLACE MATERIAL WITH SLOPE AWAY FROM STRUTTUF AREAS

INSTALL DEWCE TO PROTECT STEEP SLOPES

DEVICE TO RETAIN

STABILIZE OUT-SLOPES AND MULCH IF REQUIRED

PHASE IV

FILL SEQUENCE

REMOVE BERM ONCE

PHASE_II-A

DEVICE TO LIMIT RUNOFF FROM SENSITIVE AREAS

STABILIZE LOWER
PORTION OF SLOPE
MANEDIATELY UPON
PLACEMENT

MORKING FACE
SHALL ALMAYS
SLOPE AWAY FROM
SENSITIVE AREA

EXCAVATE AREAS ONLY AS REQUIRED PRIOR TO PLACEMENT OF MATERIALS

PHASE III

PHASE I

PHASE II-B

EXCAVATE AS SHOWN IN PMASE 2 LEAVE 2 FOOT HIGH BERN UNTIL GRASS IS ESTABLISHED AT TOE OF BERN

DECIDUOUS TREE PLANTING DETAIL

1	2/25/2021	ROADWAY REVISIONS	CN A/WD
NO.	DATE	REVISIONS	BY

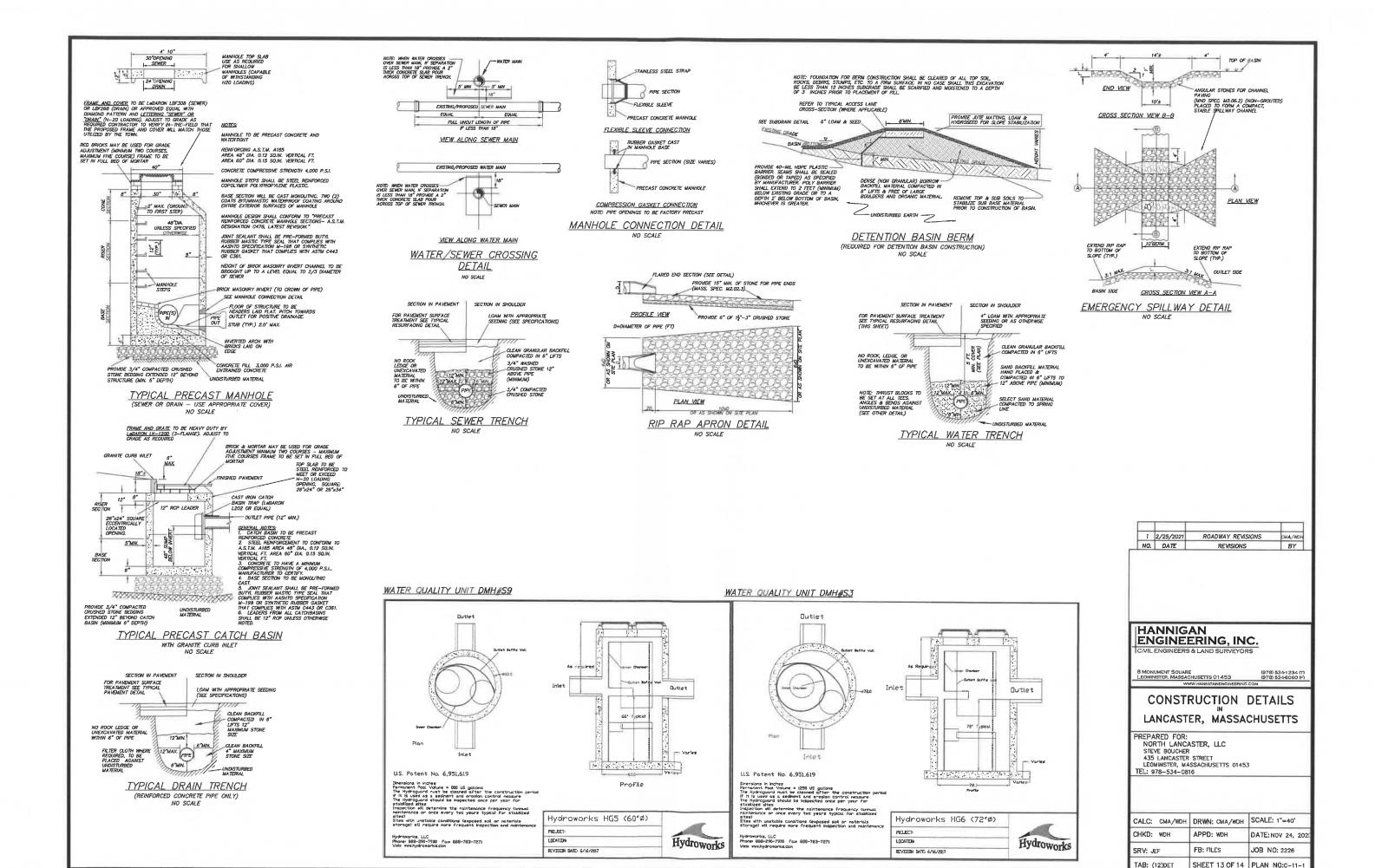
HANNIGAN ENGINEERING, INC. CIVIL ENGINEERS & LAND SURVEYORS

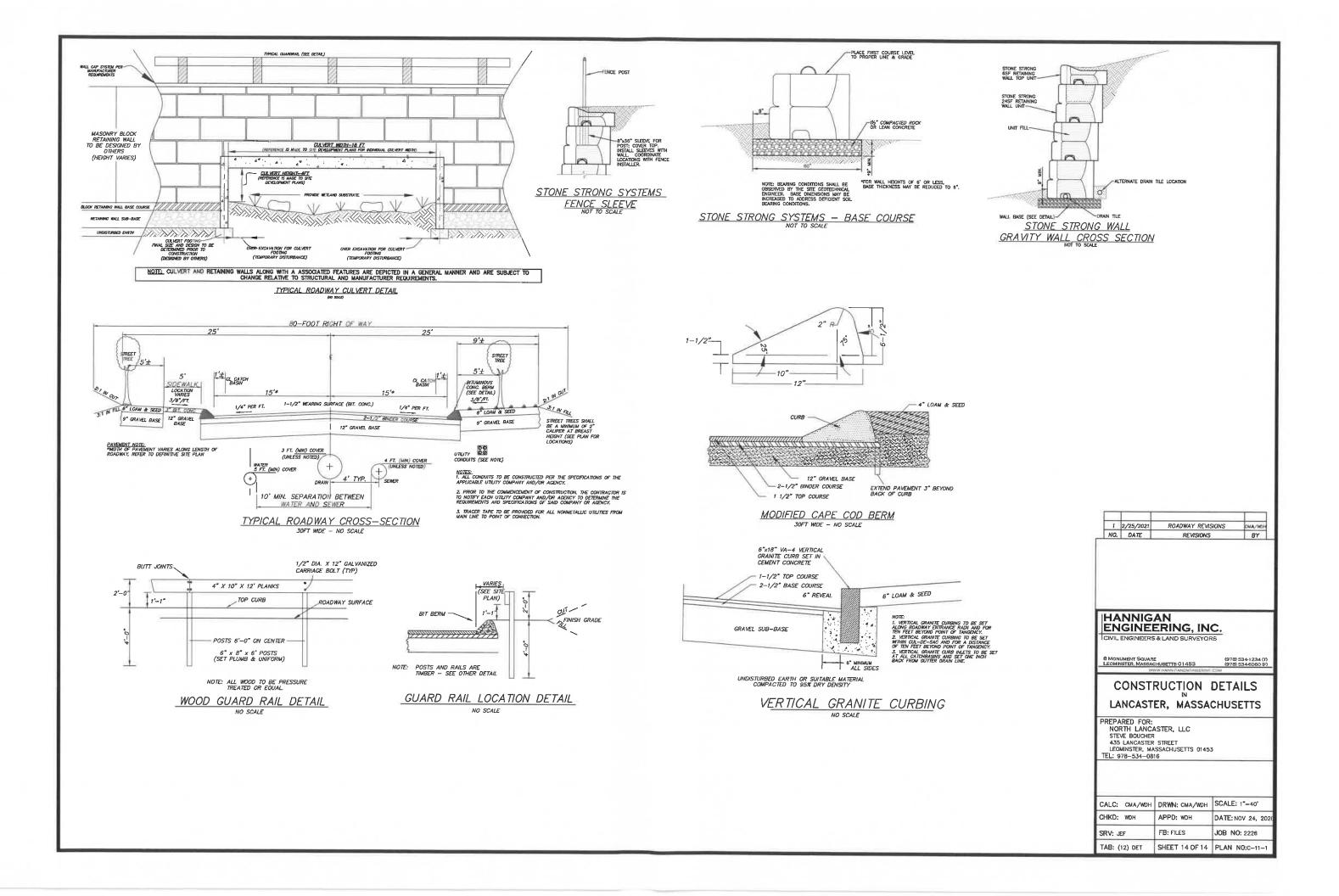
78) 534-1234 (T) 78) 534-6060 (F)

CONSTRUCTION DETAILS LANCASTER, MASSACHUSETTS

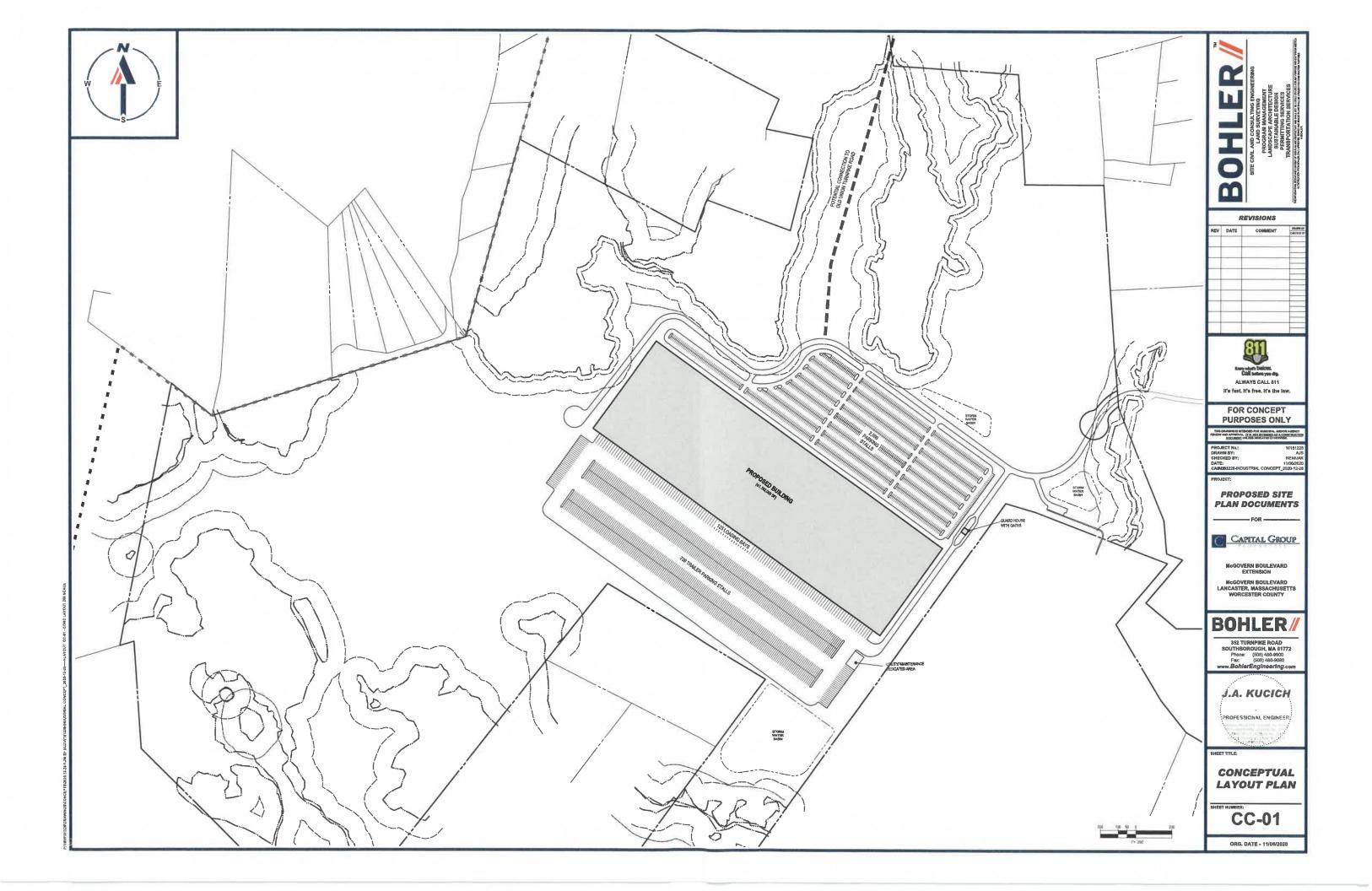
PREPARED FOR-NORTH LANCASTER, LLC 435 LANCASTER STREET LEOMINSTER, MASSACHUSETTS 01453

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CHKD: WDH	APPD: WOH	DATE: NOV 24, 20:	
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FOR CONCEPT PURPOSES ONLY

PROPOSED SITE PLAN DOCUMENTS



BOHLER/

352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9800 Fax: (508) 480-9080 www.BohlerEngineering.com



CONCEPTUAL LAYOUT PLAN

CC-01

ORG. DATE - 11/06/2020





REVISIONS REV DATE COMMENT CHARACTER COMMENT CHAR



it's fast, it's free, it's the law.

FOR CONCEPT PURPOSES ONLY

THE DRAWING IS INTENDED FOR MEMOCPAL AND/OR AGENCY
REVIEW AND APPROVAL. IT IS NOT _______AS A CONSTRUCTION
DOCUMENT UNITED ROCCATED OTHERWISE.

PROJECT No.: W18122
DRAWN BY: A.
CHECKED BY: NEWLA
DATE: 11/06/202
CASM202228-INDUSTRIAL CONCEPT_2020-12-2

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

____ FOR ___



McGOVERN BOULEVARD EXTENSION

McGOVERN BOULEVARD LANCASTER, MASSACHUSETTS WORCESTER COUNTY

BOHLER/

352 TURNPIKE ROAD SOUTHBORQUGH, MA 01772 Phone: (508) 480-9900 Fax: (508) 480-9080 www.BohlerEngineering.com

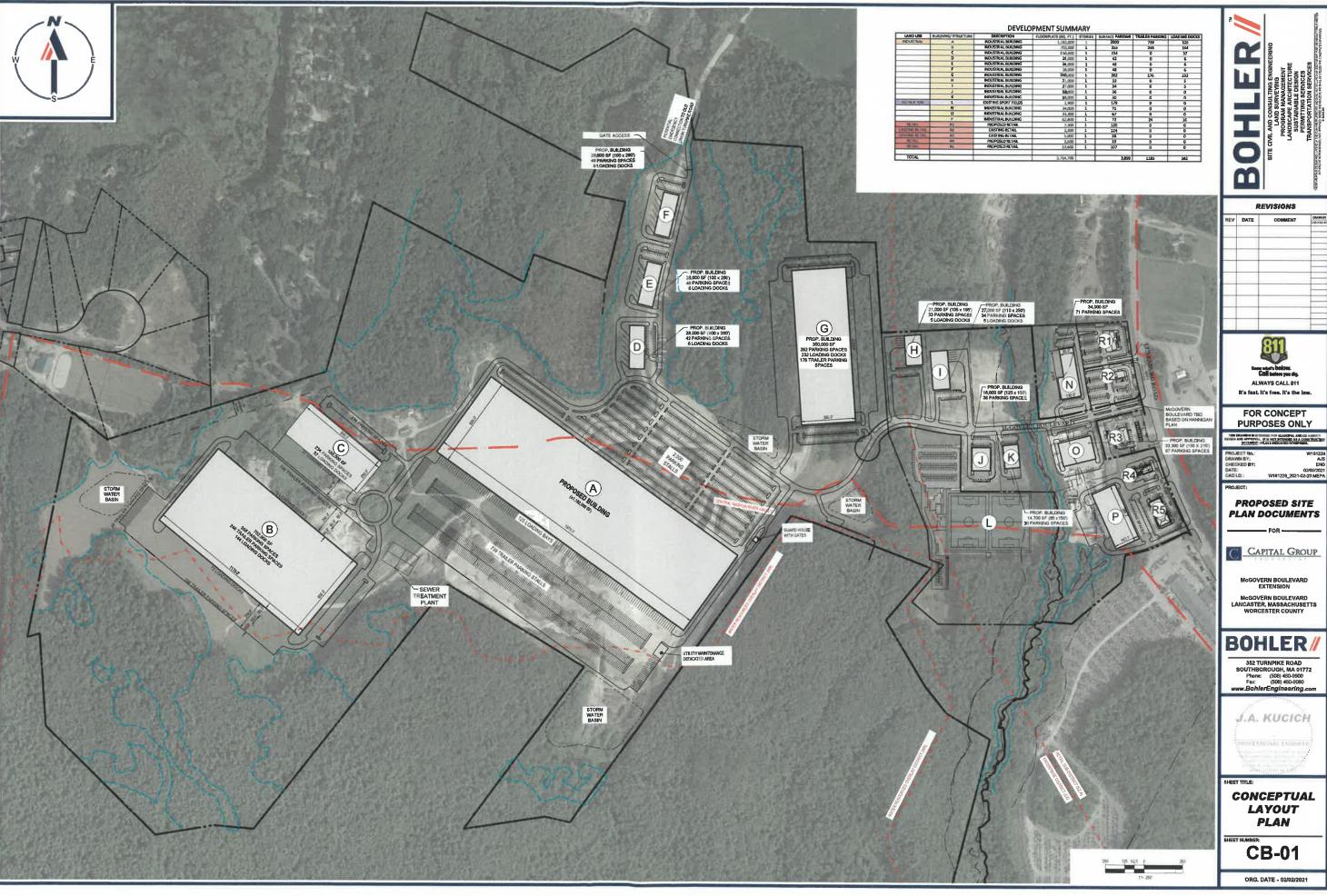


SHEET TITLE

CONCEPTUAL LAYOUT PLAN

SHEET NUMBER:

ORG. DATE - 11/06/2020



146 Dascomb Road Andover, MA 01810 978-794-1792 www.TheEngineeringCorp.com LEFT TURN LANE TO PROVIDE MINIMUM OF 250 FEET OF STORAGE LENGTH LUNENBURG ROAD (ROUTE 70) POTENTIAL APPROACH TO/FROM KIMBALL FARM PREPARED FOR Capital Group Prop. PROPOSED SIGNALIZED INTERSECTION MAINTAIN EXISTING EASTERN 01772 EDGE OF PAVEMENT 12' LEFT TURN ONLY LANE 12' RIGHT TURN ONLY LANE 5' SHOULDER 5,5' SIDEWALK RETAIN EXISTING UTILITY POLES ON SOUTH SIDE REVISIONS 10' SHARED USE PATH W/ 5' GRASS BUFFER W/ 5' SHOULDER RIGHT TURN LANE TO PROVIDE MINIMUM OF 250 FEET OF STORAGE LENGTH 15' OUTSIDE TRAVEL LANE MCGOVERN BOULEVARD 11' INSIDE TRAVEL LANE ISSUED FOR 5' SHOULDER Permitting 5.5' SIDEWALK 100' LANE TAPER PROJECT TITLE Capital Commerce LEFT TURN LANE TO PROVIDE Center MINIMUM OF 300 FEET OF STORAGE LENGTH PROJECT LOCATION McGovern Boulevard, Lancaster, MA HANNIGAN ENGINEERING TO CONTINUE Conceptual Intersection **ROADWAY DESIGN Improvements** MAINTAIN 5.5' SIDEWALKS, 5' SHOULDERS, AND 11' TRAVEL LANES TO TAPER BACK TO 2-LANE CULVERT CROSSING TEC CAD FILE DRAWING NO.



DECICNED BY	THANK	
DESIGNED BY	JWW	
DRAWN BY	JWW	
CHECKED BY	KRD	
DATE	12/29/2020	
SCALE	1" = 30'	

259 Turnpike Road Southborough, MA

SHEET 1 OF 1

PERMITTING SET - NOT FOR CONSTRUCTION

