

West Wetlands

Rain Garden Constructed in 2020

Southeast Wetlands

OWNER:
COMMONWEALTH OF MASSACHUSETTS
BOARD OF REGIONAL COMMUNITY
COLLEGES
PARCEL 459-2-13
BOOK 5451, PAGE 264
100 ELLIOTT STREET
NORTHERN ESSEX COMMUNITY COLLEGE

- NOTES:**
- 1) THE TOPOGRAPHY, SURFACE IMPROVEMENTS, AND SITE DETAIL DEPICTED HEREON WERE OBTAINED FROM AN ON-THE-GROUND INSTRUMENT SURVEY CONDUCTED BY BRENNAN CONSULTING, INC. BETWEEN JULY 3, 2025 AND AUGUST 19, 2025, AS WELL AS A UAV SURVEY PERFORMED BY BRENNAN CONSULTING, INC. ON JULY 3, 2025.
 - 2) LIMIT OF LIDAR SCANNING LINE SHOWN HEREON DEFINES THE BOUNDARY BETWEEN THE SURVEYS PERFORMED BY BRENNAN CONSULTING, INC. AND THE UTILIZATION OF USGS LIDAR DATA.
 - 3) KENOZA STREET RIGHT-OF-WAY BOUNDARY LINES AS SHOWN HEREON WERE DETERMINED FROM AN ON-THE-GROUND INSTRUMENT SURVEY CONDUCTED BY BRENNAN CONSULTING, INC. BETWEEN NOVEMBER 19, 2025 AND DECEMBER 1, 2025.
 - 4) THE HORIZONTAL DATUM IS BASED UPON THE MASSACHUSETTS COORDINATE SYSTEM, NAD83, MAINLAND ZONE AS DERIVED FROM GPS OBSERVATIONS.
 - 5) THE VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DERIVED FROM GPS OBSERVATIONS.
 - 6) CONTOUR INTERVAL EQUALS ONE (1) FOOT.
 - 7) BY GRAPHIC REPRESENTATION ONLY, PROPERTY LIES WITHIN ZONE X (NO SCREEN); AREA OF MINIMAL FLOOD HAZARD, PER FIRM 25009C0091G, EFFECTIVE 07/08/2025.
 - 8) BENCHMARK INFORMATION:
TBM BREN-1: X-CUT SET ON TOP OF CONCRETE RETAINING WALL WITH HANDRAIL AT SOUTHWEST CORNER OF SPORT AND FITNESS CENTER BUILDING. ELEVATION = 124.33
TBM BREN-2: X-CUT SET ON NORTHEAST CORNER OF CONCRETE GENERATOR PAD AT SEWER PUMP STATION. ELEVATION = 123.95
TBM BREN-3: X-CUT SET ON NORTHWEST BOLT OF LIGHT POLE BASE, EAST SIDE OF DRIVE. ELEVATION = 121.98
TBM BREN-4: X-CUT SET ON NORTHWEST BOLT OF LIGHT POLE BASE, EAST SIDE OF DRIVE AT ENTRANCE TO OPPORTUNITY WORK. ELEVATION = 129.24
 - 9) ALL UNDERGROUND UTILITY INFORMATION DEPICTED HEREON WAS COMPILED FROM PLANS OF RECORD AND VISUAL FIELD EVIDENCE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFOREMENTIONED RECORD PLANS AND ARE APPROXIMATE ONLY. BRENNAN CONSULTING, INC. CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLANS SINCE SUBSURFACE UTILITIES CANNOT BE VISIBLY VERIFIED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL TOLL FREE, THE DIG SAFE CALL CENTER AT 1-888-344-7233 SEVENTY-TWO HOURS PRIOR TO EXCAVATION.
 - 10) THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF BRENNAN CONSULTING, INC. AND ISSUED TO OUR CLIENT FOR PURPOSES RELATED DIRECTLY AND SOLELY TO BRENNAN CONSULTING, INC. AND OUR SCOPE OF SERVICES UNDER CONTRACT TO OUR CLIENT FOR THIS PROJECT. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN CONSENT IS PROVIDED BY BRENNAN CONSULTING, INC.

- LEGEND**
- TOPO**
- XX--- MINOR CONTOUR
 - XX--- MAJOR CONTOUR
 - XX.X SPOT ELEVATION
- MON/TRAV**
- IR/IP IRON PIPE/ROD
 - LPTK LEAD PLUG & TACK
 - EPLP ESCUTCHEON PIN LEAD PLUG
 - BFP BEANPOLE FOUND
 - BPS BEANPOLE SET
 - PK PK NAIL
 - DH DRILL HOLE
 - SB/DH BOUND W/DRILL HOLE FOUND
 - CB/DH BOUND W/DRILL HOLE SET
 - SB/CB BOUND
 - H/T HUB/TACK
 - M MAGNETIC MAIL
 - T TARGET
 - S SCRIBE
 - TP TRAVERSE POINT
 - GPS GPS CONTROL
- SEWER**
- S — SEWER LINE
 - CS — COMBINED SYSTEM LINE
 - SM ○ SEWER MANHOLE
 - CO ○ CLEANOUT
 - V VENT
- DRAIN**
- D — DRAIN LINE
 - CB ○ CATCH BASIN
 - AD/RD ○ AREA/ROOF DRAIN
 - CO ○ CLEANOUT
 - OW ○ OBSERVATION WELL
- WATER**
- W — WATER LINE
 - WM ○ WATER MANHOLE
 - PIV POST INDICATOR VALVE
 - SH SHUTOFF
 - HYD HYDRANT
 - WG WATER GATE
 - SPR SPRINKLER
 - WW WATER WELL
 - BWSC BW SC
 - HH HH IRRIGATION CONTROL VALVE
 - STP STANDPIPE
 - SPIG SPIGOT
- ELEC**
- E — ELECTRIC LINE
 - OHW ○ OVERHEAD WIRES
 - EM ELECTRIC MANHOLE
 - UP ○ UTILITY POLE
 - UP/L ○ UTILITY POLE W/ LIGHT
 - GW GUY WIRE
 - EMR ELECTRIC METER
 - AC AIR CONDITIONER
 - FL FLOOD LIGHT
 - TR TRANSFORMER
 - GH GENERATOR
 - TFC TRAFFIC CONTROL BOX
 - TS TRAFFIC SIGNAL
 - MTB MTB LINES
 - MBT MBT MANHOLE
 - TL TELEPHONE LINES
 - TM TELEPHONE MANHOLE
 - EMB EMERGENCY CALL BOX
 - FTB TELEPHONE BOOTHS
 - FB FIRE ALARM BOX
 - C CABLE
 - CLM CABLE MANHOLE
 - SL STREET LIGHT LINES
 - L LIGHT
 - DL DOUBLE LIGHT
- PHONE**
- P — PHONE LINE
 - PM ○ PHONE MANHOLE
 - EMB ○ EMERGENCY CALL BOX
 - FTB ○ TELEPHONE BOOTHS
 - FB ○ FIRE ALARM BOX
 - C ○ CABLE
 - CLM ○ CABLE MANHOLE
 - SL ○ STREET LIGHT LINES
 - L ○ LIGHT
 - DL ○ DOUBLE LIGHT
- CABLE**
- C — CABLE
 - CLM ○ CABLE MANHOLE
 - SL ○ STREET LIGHT LINES
 - L ○ LIGHT
 - DL ○ DOUBLE LIGHT
- LIGHTS**
- L — LIGHT
 - DL ○ DOUBLE LIGHT
- GAS/STEAM**
- G — GAS LINE
 - GG GAS GATE
 - GS GAS SHUTOFF
 - GM GAS METER
 - V VENT
 - ST STEAM LINES
 - SM STEAM MANHOLE
- REGULATORY**
- W — WETLAND LIMIT
 - W — WETLAND FLAG
 - B — RIVERFRONT BUFFER
 - B — WETLAND BUFFER
 - F — FEMA LIMIT
- SIT/DET**
- C — CHAINLINK FENCE
 - W — WOOD FENCE
 - G — GUARDRAIL
 - M ○ MANHOLE
 - S ○ SIGN
 - PM ○ PARKING METER
 - B ○ BOULDER
 - C ○ CAMERA
 - BOLLARD/POST BOLLARD/POST
 - SB ○ SOIL BORING
 - RR ○ RAILROAD TRACKS
 - RG ○ RAILROAD GATE
 - TRASH CAN TRASH CAN
 - B ○ BASKETBALL HOOP
 - SD ○ SATELLITE DISH
 - T ○ TREELINE
 - CT ○ CONIFEROUS TREE
 - DT ○ DECIDUOUS TREE
 - S ○ SHRUB
 - B ○ BUSH
- REFERENCES:**
- SOUTHERN ESSEX COUNTY REGISTER OF DEEDS
 - CITY OF HAVERHILL ENGINEERING DEPARTMENT
 - DEED BOOK 5154, PAGE 264
 - DEED BOOK 5556, PAGE 93
 - PLAN BOOK 115, PAGE 68
 - PLAN BOOK 154, PAGE 15
 - PLAN BOOK 155, PAGE 49
 - PLAN BOOK 159, PAGE 72
 - PLAN BOOK 344, PAGE 32
 - PLAN BOOK 388, PAGE 60
 - PLAN 168 OF 1942
 - PLAN 203 OF 1960
 - PLAN 92 OF 1963
 - PLAN 5964
 - PLAN 7593
 - PLAN 7922
 - PLAN 8111
 - PLAN 8198
 - PLAN 8570

EXISTING CONDITIONS PLAN
Northern Essex Community College
Haverhill, MA

PREPARED FOR
Jones Architecture

DATE: 09-03-2025

SCALE: 1" = 50'

Brennan Consulting
ENGINEERING • TRANSPORTATION • SURVEYING
24 RAY AVENUE, BURLINGTON, MA
PHONE: (781) 273-3434 FAX: (781) 273-3430

NO.	DATE	DESCRIPTION	BY

CHECKED BY: CE
DRAWN BY: CG
PROJECT 25527
EX-1



Northern Essex
Community College

PROJECT NAME:
NECC ATHLETIC FIELD
RENOVATIONS

PROJECT #:
P0033625

CLIENT:
NORTHERN ESSEX
COMMUNITY COLLEGE

DEVELOPMENT

ISSUE LOG	Date	Issue Title

REVISIONS	No.	Date	Revision

CONSULTANT:
Brennan Consulting
ENGINEERING • ARCHITECTURE • SURVEYING
A WBE & DBE Certified Business



JONES ARCH

Jones Architecture, INC
10 Derby Square
Salem, MA 01970

978.744.5200
www.jonesarch.com

DATE:
03/10/2026

PROJECT NUMBER:
2518

SCALE:
1" = 40'

DRAWING TITLE:
**GRADING &
DRAINAGE PLAN**

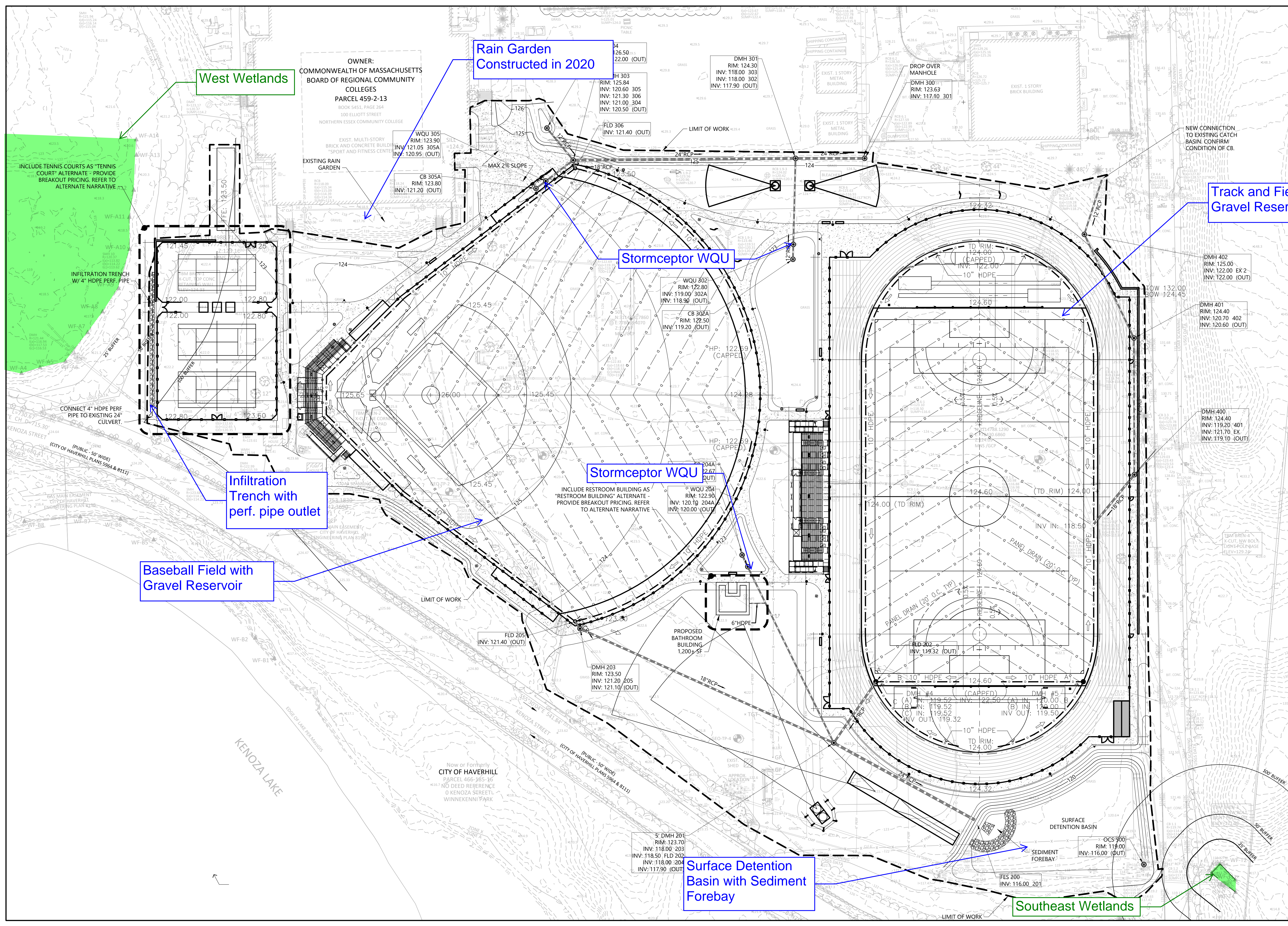
DATE:
03/10/2026

PROJECT NUMBER:
2518

SCALE:
1" = 40'

DRAWING TITLE:
**GRADING &
DRAINAGE PLAN**

C-01



West Wetlands

Rain Garden
Constructed in 2020

Stormceptor WQU

Stormceptor WQU

Infiltration
Trench with
perf. pipe outlet

Baseball Field with
Gravel Reservoir

Surface Detention
Basin with Sediment
Forebay

Southeast Wetlands

Track and Field with
Gravel Reservoir

OWNER:
COMMONWEALTH OF MASSACHUSETTS
BOARD OF REGIONAL COMMUNITY
COLLEGES
PARCEL 459-2-13
BOOK 5451, PAGE 264
100 ELLIOTT STREET
NORTHERN ESSEX COMMUNITY COLLEGE

INCLUDE RESTROOM BUILDING AS
"RESTROOM BUILDING" ALTERNATE -
PROVIDE BREAKOUT PRICING. REFER
TO ALTERNATE NARRATIVE

INCLUDE TENNIS COURTS AS "TENNIS
COURT" ALTERNATE - PROVIDE
BREAKOUT PRICING. REFER TO
ALTERNATE NARRATIVE

NEW CONNECTION
TO EXISTING CATCH
BASIN. CONFIRM
CONDITION OF CB.

CONNECT 4" HDPE PERF
PIPE TO EXISTING 24"
CULVERT.

Now or Formerly
CITY OF HAVERHILL
PARCEL 466-385-16
NO DEED REFERENCE
0 KENOZA STREET
WINNEKENNI PARK

5' DMH 201
RIM: 123.70
INV: 118.00 203
INV: 118.50 FLD 202
INV: 118.00 204
INV: 117.90 (OUT)

WQU 302
RIM: 122.80
INV: 119.00 302A
INV: 118.90 (OUT)

WQU 204
RIM: 122.90
INV: 120.70 204A
INV: 120.00 (OUT)

WQU 305
RIM: 123.90
INV: 121.05 305A
INV: 120.95 (OUT)

CB 305A
RIM: 123.80
INV: 121.20 (OUT)

DMH 203
RIM: 123.50
INV: 121.20 205
INV: 121.10 (OUT)

DMH 203
RIM: 123.50
INV: 121.20 205
INV: 121.10 (OUT)

DMH 301
RIM: 124.30
INV: 118.00 303
INV: 118.00 302
INV: 117.90 (OUT)

DROP OVER
MANHOLE
DMH 300
RIM: 123.63
INV: 117.10 301

DMH 402
RIM: 125.00
INV: 122.00 EX 2
INV: 122.00 (OUT)

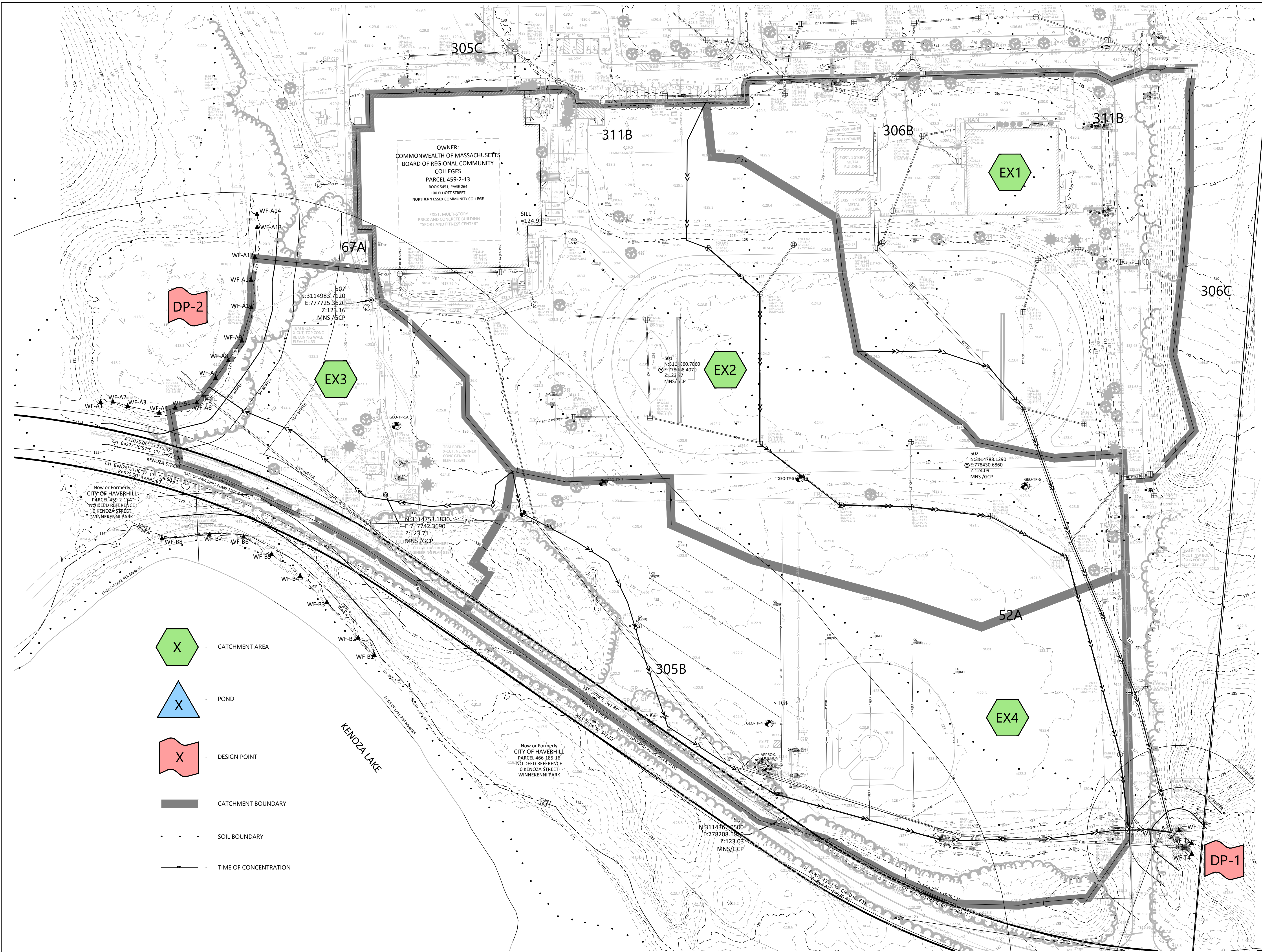
DMH 401
RIM: 124.40
INV: 120.70 402
INV: 120.60 (OUT)

DMH 400
RIM: 124.40
INV: 119.20 401
INV: 121.70 EX
INV: 119.10 (OUT)

DMH #4 (CAPPED)
RIM: 119.52
INV: 119.52 (A)
INV: 119.52 (B)
INV: 119.52 (C)

FES 200
INV: 116.00 201

OCS 900
RIM: 119.00
INV: 116.00 (OUT)



Now or Formerly
GREATER NEWBURYPORT
OPPORTUNITIES, INC.
PARCEL 466-155-18-1
BOOK 30039, PAGE 515
671 KENOZA STREET

EXISTING CONDITIONS DRAINAGE PLAN
Northern Essex Community College
Haverhill, MA

PREPARED FOR
Jones Architecture
DATE: 02-26-2026

Brennan Consulting
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PHONE: (781) 273-3434 FAX: (781) 273-3430

NO.	DATE	DESCRIPTION	BY

CHECKED BY: CE
DRAWN BY: CG

PROJECT 25527

F-4

SCALE: 1" = 50'



Northern Essex Community College

PROJECT NAME:
NECC ATHLETIC FIELD RENOVATIONS

PROJECT NUMBER:
P0033625

CLIENT:
NORTHERN ESSEX COMMUNITY COLLEGE

PHASE/ISSUE:
DESIGN DEVELOPMENT

ISSUE LOG:
Date Issue
02/26/2026 DESIGN DEVELOPMENT (NOI SUBMISSION)

No. Date Revision

CONSULTANT:
HUNTRESS Sports
Landscape Architects & Planners
17 Tewksbury Street
Andover, MA 01810

Brennan Consulting
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JONES ARCH

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10 Derby Square
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978.744.5200
www.jonesarch.com

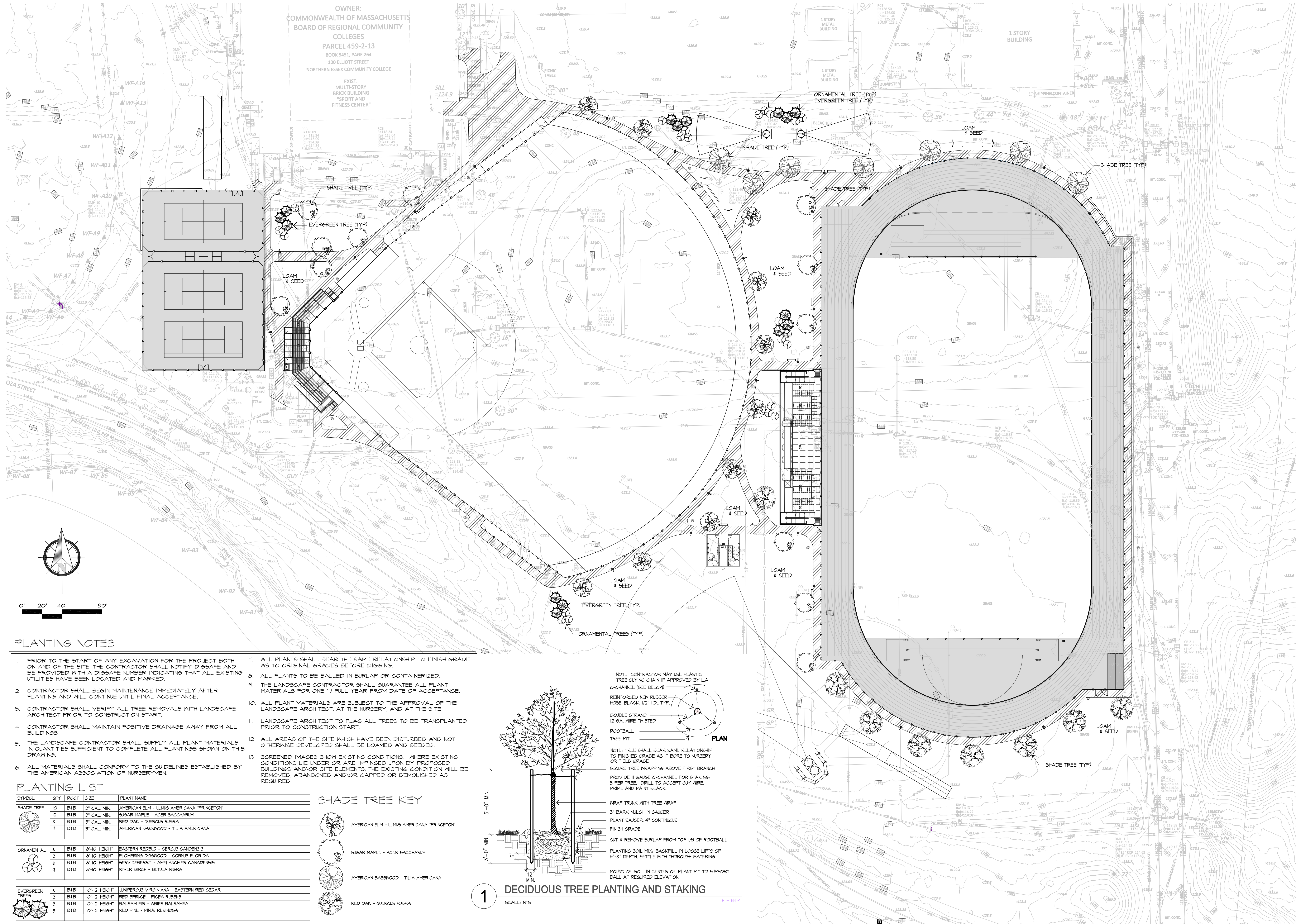
STAMP:
NOT FOR CONSTRUCTION



DATE:
02/26/2026
JA PROJECT NUMBER: 2518 SCALE: 1" = 40'

DRAWING TITLE:
PLANTING PLAN

L105



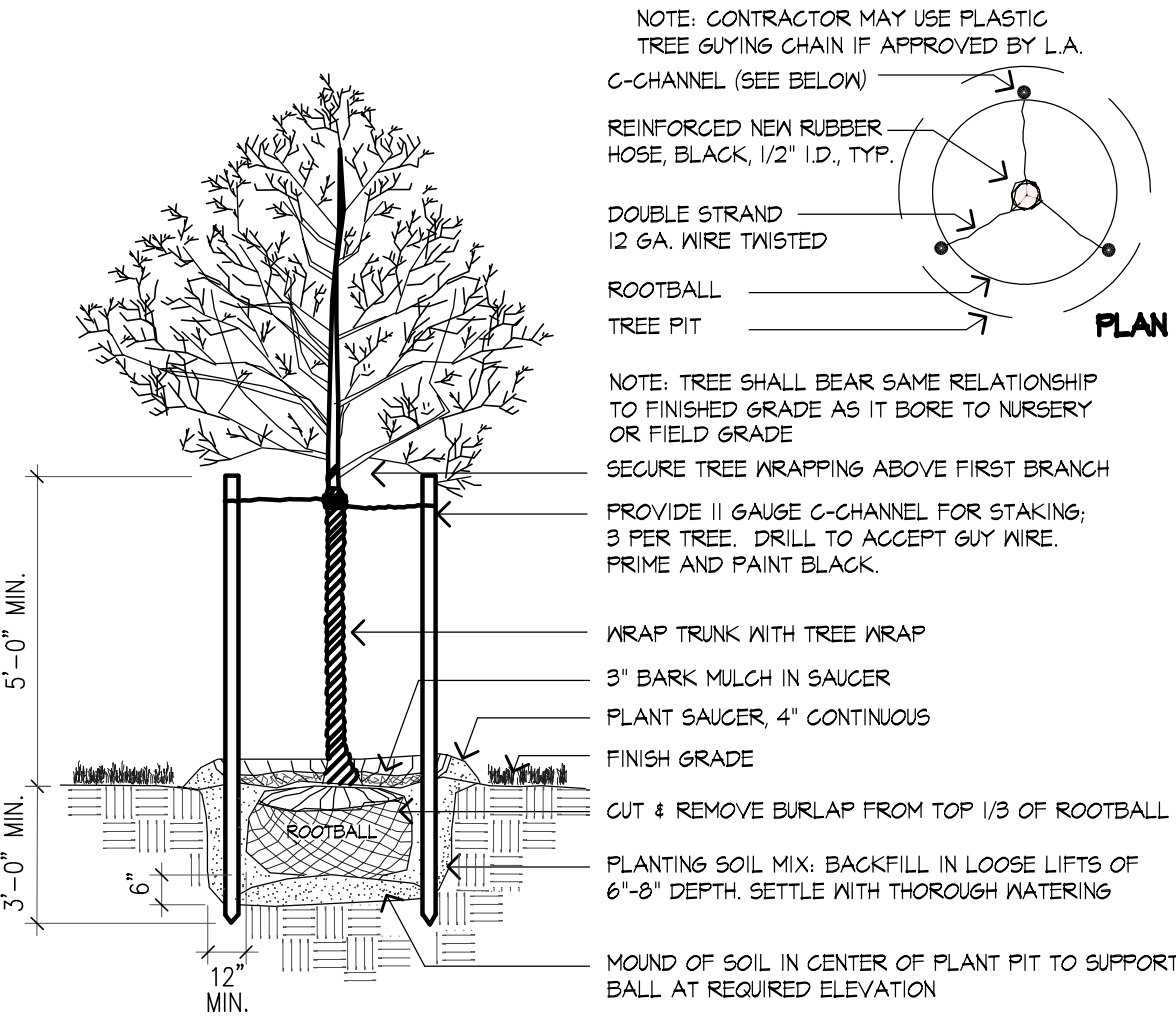
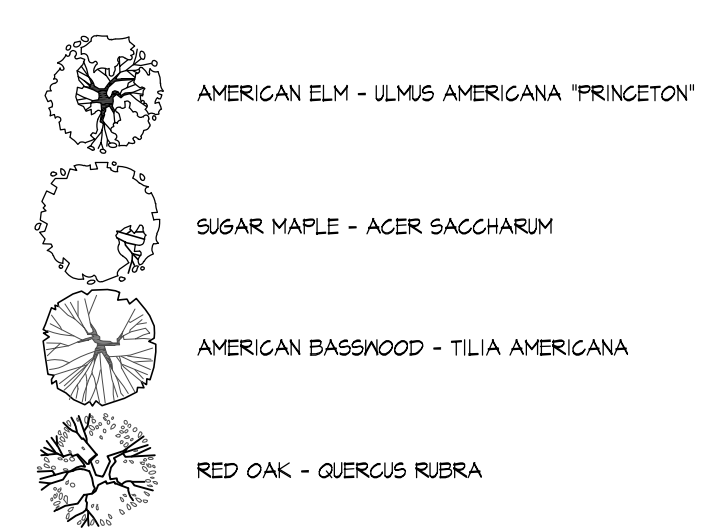
PLANTING NOTES

- PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
- CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL ACCEPTANCE.
- CONTRACTOR SHALL VERIFY ALL TREE REMOVALS WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION START.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS.
- THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE ALL PLANTINGS SHOWN ON THIS DRAWING.
- ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
- ALL PLANTS TO BE BALLED IN BURLAP OR CONTAINERIZED.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
- ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE NURSERY, AND AT THE SITE.
- LANDSCAPE ARCHITECT TO FLAG ALL TREES TO BE TRANSPLANTED PRIOR TO CONSTRUCTION START.
- ALL AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOAMED AND SEEDED.
- SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.

PLANTING LIST

SYMBOL	QTY	ROOT SIZE	PLANT NAME
	10	B4B	8' GAL. MIN. AMERICAN ELM - ULMUS AMERICANA 'PRINCETON'
	12	B4B	8' GAL. MIN. SUGAR MAPLE - ACER SACCHARUM
	8	B4B	8' GAL. MIN. RED OAK - QUERCUS RUBRA
	7	B4B	8' GAL. MIN. AMERICAN BASSWOOD - TILIA AMERICANA
	6	B4B	8'-10' HEIGHT EASTERN REDBUD - CERCIS CANADENSIS
	3	B4B	8'-10' HEIGHT FLOWERING DOGWOOD - CORNUS FLORIDA
	6	B4B	8'-10' HEIGHT SERVICEBERRY - AMELANCHIER CANADENSIS
	4	B4B	8'-10' HEIGHT RIVER BIRCH - BETULA NIGRA
	6	B4B	10'-12' HEIGHT JUNIPERUS VIRGINIANA - EASTERN RED CEDAR
	3	B4B	10'-12' HEIGHT RED SPRUCE - PICEA RUBENS
	3	B4B	10'-12' HEIGHT BALSAM FIR - ABIES BALSAEAMA
	3	B4B	10'-12' HEIGHT RED PINE - PINUS RESINOSA

SHADE TREE KEY



1 DECIDUOUS TREE PLANTING AND STAKING
SCALE: NTS

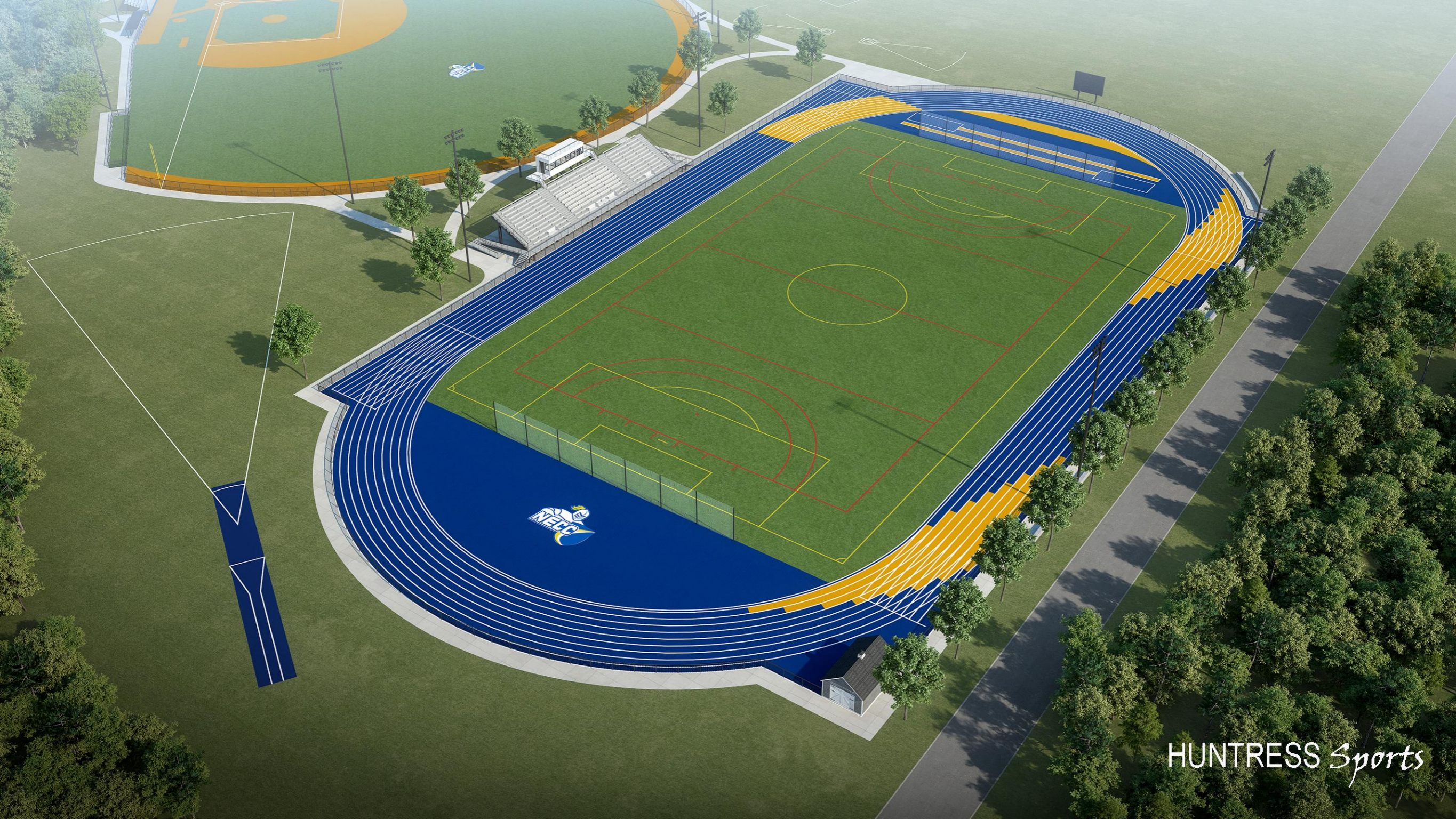
NOTE: CONTRACTOR MAY USE PLASTIC TREE GUYING CHAIN IF APPROVED BY LA
C-CHANNEL (SEE BELOW)
REINFORCED NEW RUBBER HOSE, BLACK, 1/2" ID, TYP.
DOUBLE STRAND 1/2 GA. WIRE TWISTED
ROOTBALL
TREE PIT

NOTE: TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO NURSERY OR FIELD GRADE
SECURE TREE WRAPPING ABOVE FIRST BRANCH
PROVIDE 11 GAUGE C-CHANNEL FOR STAKING; 3 PER TREE. DRILL TO ACCEPT GUY WIRE. PRIME AND PAINT BLACK.

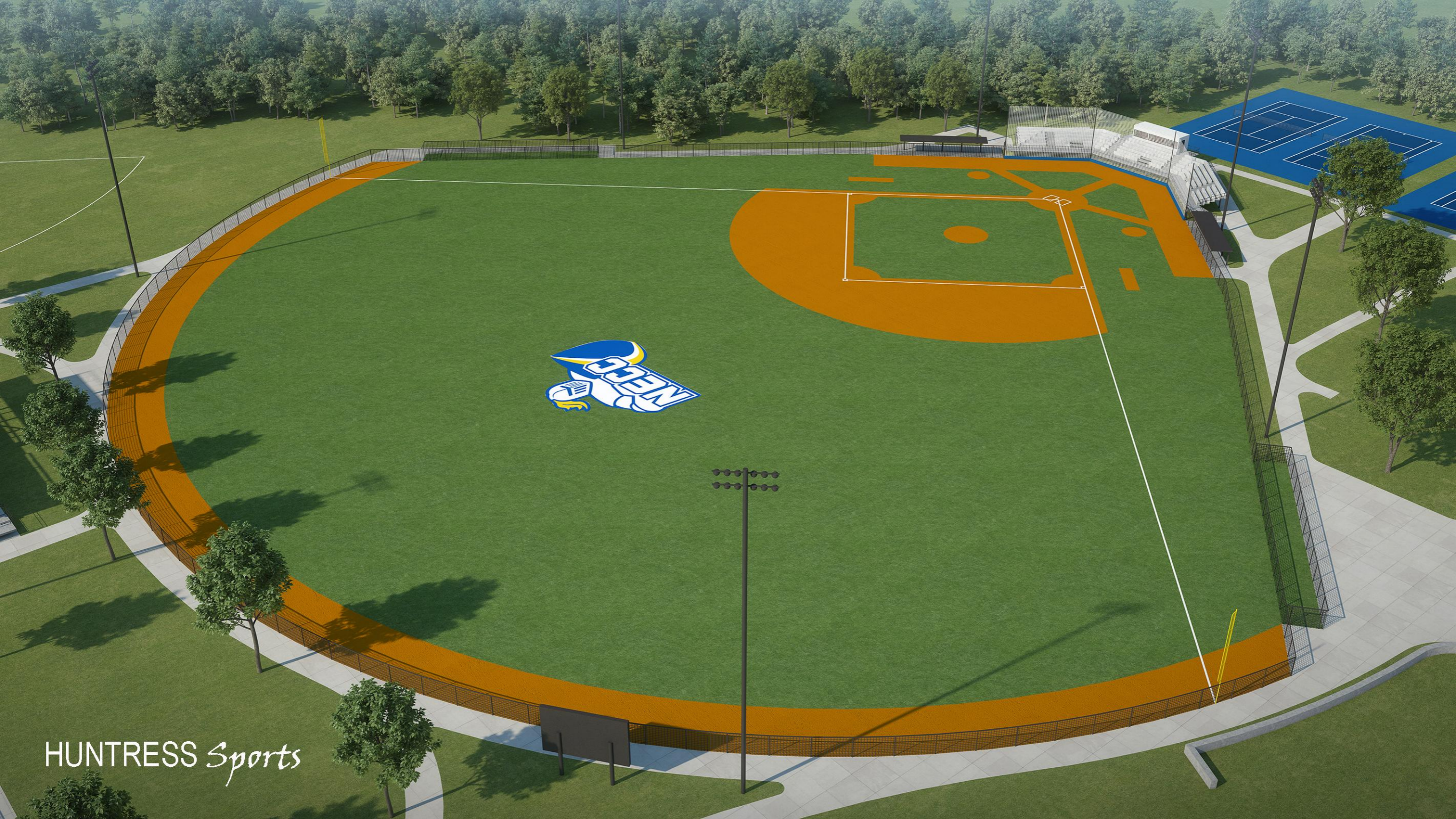
WRAP TRUNK WITH TREE WRAP
3" BARK MULCH IN SAUCER
PLANT SAUCER, 4" CONTINUOUS
FINISH GRADE
CUT & REMOVE BURLAP FROM TOP 1/3 OF ROOTBALL
PLANTING SOIL MIX. BACKFILL IN LOOSE LIFTS OF 6"-8" DEPTH. SETTLE WITH THOROUGH WATERING
MOUND OF SOIL IN CENTER OF PLANT PIT TO SUPPORT BALL AT REQUIRED ELEVATION



HUNTRESS *Sports*



HUNTRESS Sports



HUNTRESS Sports