MARSHALL SIMONDS MIDDLE SCHOOL
BRUSH FIELD RENOVATION PROJECT
BURLINGTON, MASSACHUSETTS

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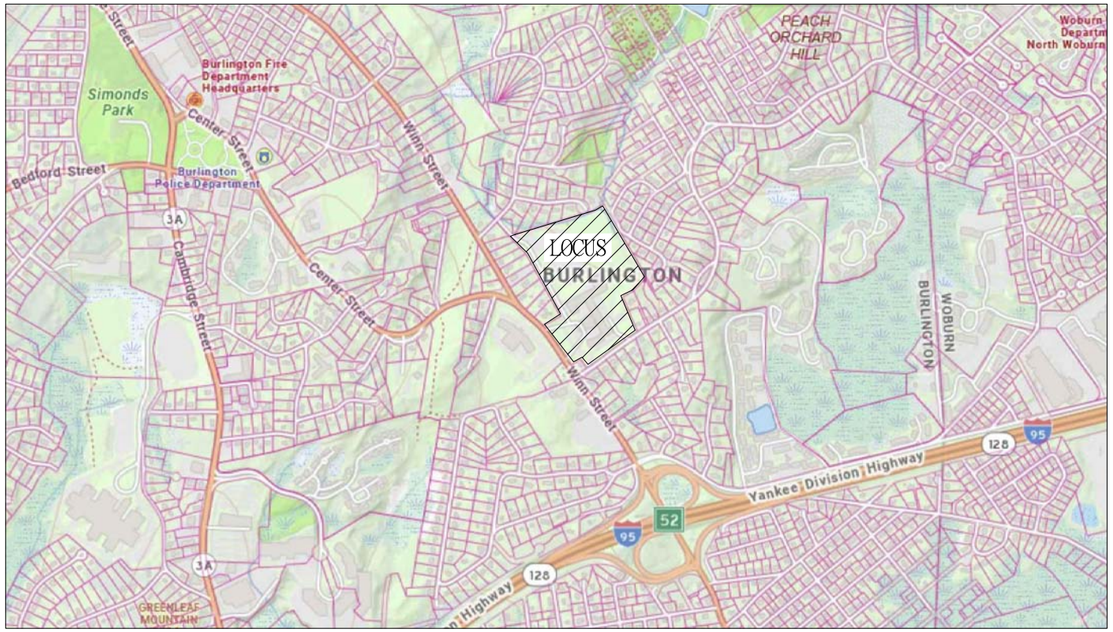
NEW SHEETS



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PROJECT

MARSHALL SIMONDS
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ATHLETIC FIELDS
RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

BURLINGTON PUBLIC
SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

NO.	REVISION	DATE

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PERMIT SET

COVER SHEET

C-1

EROSION CONTROL NOTES:

1. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   A. GRAVEL BASE COURSE HAS BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE FOR RIP RAP HAS BEEN INSTALLED;
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED;

2. THE CONTRACTOR SHALL CONDUCT DAILY AND TIMELY INSPECTION OF BOTH TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES.

3. CONSTRUCTION SHALL PROCEED IN SUCH A MANNER AS TO FACILITATE INSTALLATION OF EROSION CONTROL MEASURES AND THE COMPLETION OF GRADING, SEEDING, AND LANDSCAPING AS SOON AS POSSIBLE WITHIN AN AREA. THIS PROCEDURE SHOULD RESULT IN THE EXPOSURE OF THE SMALLEST PRACTICAL LAND AREA AT ANY ONE TIME.

4. INSTALL SILT SOCKS AS SHOWN ON PLAN AND IN DETAIL BEFORE EARTHWORK COMMENCES. ADDITIONAL SILT SOCKS MAY BE REQUIRED AS WORK CONTINUES.

5. CUT AND FILL SLOPES BOTH CALL FOR EROSION CONTROL MEASURES.

6. ALL DISTURBED AREAS SHALL HAVE TOPSOIL SPREAD (8" MINIMUM) AND BE LIMED, FERTILIZED, TILLED, SEEDED AND MULCHED. ALL SLOPES 3:1 (3 RUN 1 RISE) AND STEEPER SHALL HAVE MULCH HELD IN PLACE WITH BIODEGRADABLE JUTE NETTING, STAPLED AND STAKED. EACH AREA SHALL BE LIMED, FERTILIZED, PREPARED, SEEDED AND MULCHED (WITH ANCHORED NETTING IF REQUIRED) WITHIN 24 HOURS OF FINAL GRADING. WHEN PERMANENT SEEDING CANNOT BE INSTALLED BY SEPTEMBER 15, TEMPORARY SEEDING AND MULCHING OF ALL DISTURBED AREAS SHALL BE INSTALLED IMMEDIATELY AND MAINTAINED IN THAT CONDITION UNTIL PERMANENT PRACTICES CAN BE INSTALLED IN THE FOLLOWING PLANTING SEASON.

7. TEMPORARY STABILIZATION OF DISTURBED AREAS: SEED BED PREPARATION:
   TILL THREE INCHES DEEP MIXING IN FERTILIZER.
   APPLY LIME 2 TONS/ACRE (100#/1,000 SQ. FT.)
   FERTILIZE: UNIFORMLY APPLY NOT LESS THAN 300#/ACRE (7#/1,000 SQ. FT.) OF 10-20-20 OR EQUIVALENT.
   SEEDING: SELECT APPROPRIATE SEEDING MIXTURE FROM TABLE 1 BELOW. SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING; IF NOT FEASIBLE, THAN RAKE LIGHTLY TO COVER SEEDS.
   MULCHING: MULCH ALL DISTURBED AREAS WITH 1- ½ TO 2 TONS OF STRAW OR SALT MARSH HAY PER ACRE (70-90# / 1,000 SQ. FT.)
   ANCHOR ON ALL SLOPES 3:1 OR STEEPER AND FLATTER SLOPES SUBJECT TO WASHOUTS OR WIND BLOWING. JUTE OR OTHER BIODEGRADABLE NETTING, STAKING AND STAPLING MAY BE REQUIRED.

TABLE 1
PLANT SELECTION AND SEEDING RATES

SPECIES	PER ACRE	PER 1,000 SQ. FT.	REMARKS
WINTER RYE	2 BU OR 112 LBS.	2.6 LBS.	BEST FOR FALL SEEDING. SEED AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO DEPTH OF ONE INCH.
OATS	2 ½ BU OR 90 LBS.	2 LBS.	BEST FOR SPRING SEEDINGS. LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO DEPTH OF ONE INCH.
ANNUAL RYE	40 LBS.	1. LB	GROWS QUICKLY, BUT IS FOR SHORT GRASS DURATION. USE WHERE APPEARANCES ARE IMPORTANT. COVER SEED WITH NO MORE THAN ½ INCH OF SOIL WITH MULCH. SEEDING MAY BE DONE THROUGHOUT GROWING SEASON. OTHERWISE SEED EARLY SPRING OR BETWEEN AUGUST 15 AND SEPTEMBER 15.

8. PERMANENT STABILIZATION OF DISTURBED AREAS:
   SEED BED PREPARATION: TOPSOIL (SANDY LOAM, LOAM, OR SILT LOAM), FRIABLE, FREE OF TREE ROOTS, WEEDS, STONES MORE THAN 1- ½ INCHES IN DIAMETER OR LENGTH SHALL BE PLACED OVER ALL DISTURBED AREAS IN A 6" MINIMUM AND 8" MAXIMUM THICK LAYER. TOPSOIL SHALL BE FREE OF HERBICIDES AND TOXIC MATERIALS. TILL 4 INCHES DEEP MIXING IN THE FERTILIZER AND LIME. APPLY LIME 2 TONS/ACRE (100# / 1,000 SQ. FT.)
   FERTILIZER: UNIFORMLY APPLY NOT LESS THAN 500#/ACRE (12#/1,000 SQ. FT.) OF 10-20-20 OR EQUIVALENT.
   SEEDING: SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING; IF NOT FEASIBLE, THAN RAKE LIGHTLY TO COVER SEEDS.
   MULCHING: MULCH ALL DISTURBED AREAS WITH 1- ½ TO 2 TONS OF HAY OR STRAW PER ACRE (70-90# / 1,000 SQ. FT.). ANCHOR ON ALL SLOPES 3:1 OR STEEPER AND ON LATTER SLOPES SUBJECT TO WASH (WATERWAYS) AND/OR WINDBLOWN USING JUTE OR OTHER BIODEGRADABLE NETTING, STAKING, AND STAPLING.

9. TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.

10. MAINTENANCE: DURING THE CONSTRUCTION PERIOD AND UNTIL SUCH TIME AS THE LONG TERM VEGETATION IS ESTABLISHED.
    A. DISTURBED AREAS WILL BE FERTILIZED AND RESEEDED.
    B. CATCH BASINS WILL BE CHECKED AND CLEANED AS NECESSARY.
    C. DRAINAGE AND GRASS TREATMENT SWALES SHALL BE CHECKED FREQUENTLY AND CLEANED AS REQUIRED.
    D. THE HAYBALE DIKES WILL BE CHECKED ON A REGULAR BASIS AND REPAIRED AS NECESSARY TO CORRECT ANY DAMAGE, DETERIORATION, AND SHORT CIRCUITING.

11. SITE VISITS: THE ENGINEER SHALL BE CONTACTED ON A REGULAR BASIS TO OBSERVE ALL EROSION CONTROL PRACTICES AS WELL AS THE MAINTENANCE OF THE EROSION CONTROL COMPONENTS. REFER TO CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. EROSION CONTROL PRACTICES SHALL BE IN STRICT ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

12. ALL TREATMENT SWALES AND DITCHES SHALL BE ESTABLISHED PRIOR TO DIRECTING RUNOFF TO THEM.

CONSTRUCTION SEQUENCE:

1. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING NPDES GENERAL CONSTRUCTION PERMIT AND PREPARATION OF THE ASSOCIATED STORMWATER POLLUTION PREVENTION PLAN.
2. COMPLY WITH ALL THE REQUIREMENTS OF THE LOCAL CONSERVATION COMMISSION ORDER OF CONDITIONS. COLLABORATE WITH THE CONSERVATION COMMISSION AGENT FOR ALL NECESSARY INSPECTIONS AND DOCUMENTATION.
2. INSTALL SILT SOCKS AT ALL LOCATIONS INDICATED ON PLAN AND AT OTHER LOCATIONS AS DETERMINED BY ENGINEER. INSTALL OTHER TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO ANY EARTHWORK AND AS REQUIRED BY THE ORDER OF CONDITIONS. ADDITIONAL EROSION CONTROL MATERIAL SHALL BE STORED ON SITE AND UTILIZED AS NEEDED AND REQUESTED BY THE ENGINEER AND OR CONSERVATION AGENT.
3. CONSTRUCT INLET PROTECTION AT ALL CATCH BASINS.
4. STABILIZE CONSTRUCTION ENTRANCES AND TEMPORARY ACCESS ROADS WITH COARSE AGGREGATE 4 INCHES (MINIMUM) OVER COMPACTED FILL AREAS TO PREVENT OFF-SITE TRACKING BY VEHICLES AND EQUIPMENT. PROVIDE STEEL PLATES AS NECESSARY FOR CURB CROSSING.
9. INSPECT ALL DISTURBED AREAS ON A DAILY BASIS. FOLLOWING THE DAILY INSPECTION, INSTALL AS REQUIRED ANY AND ALL TEMPORARY DRAINAGE, EROSION, AND SEDIMENT CONTROL PRACTICES AS INDICATED, I.E., DIVERSION CHANNELS, BERMS, DRAINS, DITCHES, SEED AND MULCH OR OTHER PRACTICES.
10. DISCONNECT ELECTRICAL SERVICE TO THE EXISTING LIGHT POLES.
11. REMOVE AND DISPOSE EXISTING LIGHTING, FOUNDATIONS, CONDUITS, WIRING, ETC.
12. REMOVE AND DISPOSE EXISTING FENCE POTS, RAILS, FABRIC, FOOTINGS, ETC., AS INDICATED ON THE DEMOLITION AND EROSION CONTROL PLANS.
13. REMOVE AND DISPOSE EXISTING GOAL POSTS AND FOUNDATIONS.
14. SAW CUT PARKING AREAS AND WALKWAYS TO BE DEMOLISHED.
15. REMOVE AND DISPOSE BITUMINOUS CONCRETE PAVEMENT AND SUBSURFACE MATERIAL WITHIN THE LIMITS INDICATED ON THE DEMOLITION PLANS. PROOF ROLE THE BASE AND PREPARE FOR NEW DENSE GRADED CRUSHED TONE AND ASPHALT PAVEMENT.
16. REMOVE, SCREEN AND STOCKPILE EXISTING LOAM WITHIN THE LIMITS OF PROPOSED IMPERVIOUS SURFACES, AND LIMITS OF PROPOSED SYNTHETIC TURF. STOCKPILE IN DESIGNATED LOCATIONS ON SITE, PROVIDE PERIMETER EROSION CONTROL AND FACILITATE REMOVAL AND PROPER DISPOSAL FROM SITE.
17. CONTRACTOR TO KEEP, SCREEN AND STORE ONLY THE AMOUNT OF TOPSOIL NECESSARY FOR THE RESTORATION OF THE SITE AND WETLAND REPLICATIONS. ALL EXCESS MATERIAL INCLUDING TAILINGS SHALL BE REMOVED AND DISPOSED OFF SITE.
18. IMPORT, PLACE AND COMPACT CLEAN SOILS FROM NEWLY BORROWED SOURCES IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. PROOF ROLE, COMPACT AND TEST FOR COMPACTION.
19. CREATE RAIN GARDEN AND RESTORATION AREAS, HAVE INSPECTED AND APPROVED. PERFORM PLANTING INSTALLATION IN THE PLANTING SEASON AND AS APPROVED BY CONSERVATION.
20. STAKE OUT, DRILL AND INSTALL LIGHT POLE FOUNDATIONS, SCOREBOARD FOUNDATIONS, NETTING POLE FOUNDATIONS ETC.
21. EXCAVATE AND INSTALL TRANSFORMER PAD, CONDUITS, JUNCTION BOXES ETC. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITTING FROM THE TOWN INCLUDING BUT NOT LIMITED TO TRENCH PERMIT, CONDUIT AND WIRING INSPECTIONS ETC.
22. EXCAVATE, PREPARE, FORM AND POUR PERIMETER TURF NAILER.
23. CONDUCT AN PREPARE A SURVEY GRID OF THE SUB BASE AND SUBMIT TO ENGINEER FOR REVIEW AND APPROVAL. OF GREAT IMPORTANCE IS THE STORAGE VOLUMES TO BE PROVIDED IN ACCORDANCE WITH THE DESIGN PLANS AND PERMITTING DOCUMENTS.
24. ONCE APPROVED INSTALL DRAINAGE TRENCHES, COLLECTOR PIPES, FILTER FABRIC SAND FILTER AND FLAT PANEL DRAINS.
25. CREATE A TEST PLOT OF APPROXIMATELY 20' X 20' OF BASE STONE AND TOP STONE, COMPACTED TO PROJECT SPECIFICATIONS AND PERFORM INFILTRATION TESTING. THE MATERIAL SHALL BE THE SAME AND FROM THE SAME SOURCE FOR THE ENTIRE PROJECT. ONCE TESTED AND APPROVED, BEGIN IMPORTING BASE STONE AND TOP STONE MATERIALS.
26. PLACE AND COMPACT TO SPECIFICATIONS. PERFORM THE GRID SURVEY FOR THE BASE STONE AND THE TOP STONE MATERIALS. OBTAIN APPROVAL FROM THE ENGINEER AFTER EACH LAYER. TOP STONE IN EXCESS OF THE SPECULATION TOLERANCES WILL NOT BE ALLOWED.
27. INSTALL ATHLETIC FIELD LIGHTING, SCOREBOARDS, NETTING POLES, GOAL POSTS AND ALL OTHER STRUCTURES.
28. INSTALL TERRACED WALLS AND SEATING AREAS ON THE EMBANKMENT.
29. PREPARE WALKWAY BASE, PROOF ROLE, TEST FOR COMPACTION AND PREPARE FOR BINDER.
30. INSTALL FENCE POSTS, GUARD RAIL POSTS, PARKING SIGNAGE POSTS ETC.
31. PROVIDE PARKING STRIPING.
32. INSTALL FENCE RAILS, FABRIC, TIES ETC. INSTALL GUARD RAILS, AND PARKING SINGS.
33. INSTALL TERRACED SEATING MATERIALS.
34. INSTALL SYNTHETIC TURF FIELD, AND PLACE INFILL.
35. INSTALL, TEST AND INSPECT ALL WIRING FOR THE LIGHTS, SCOREBOARDS, ELECTRICAL PLUGS, ETC.
36. INSTALL ALL COMMUNICATION AND SOUND REQUIREMENTS.
37. INSTALL GATES AND LATCHES.
38. PLACE TOPSOIL ON ALL DISTURBED AREAS AND DEGRADED AREAS, COMPLETE PERMANENT FERTILIZING, LIMING, SEEDING AND MULCHING, INSTALL LANDSCAPE PLANTINGS.
39. CLEAN AND RESTORE SILT DETENTION SITES AND DRAINAGE STRUCTURES. REMOVE OTHER EROSION CONTROL PRACTICES ON A TIMELY BASIS AS PERMANENT MEASURES TAKE HOLD. SPOT FERTILIZE, SEED, AND MULCH AS REQUIRED.
40. INSPECT AND MAINTAIN GRADING, EROSION CONTROL AND SEDIMENT CONTROL PRACTICES WEEKLY AND IMMEDIATELY AFTER ALL STORMS OF MORE THAN ½ INCH PRECIPITATION IN 24 HOURS.
41. REFER TO EROSION CONTROL NOTES FOR ADDITIONAL DETAILS RELATIVE TO THE REQUIRED CONSTRUCTION SEQUENCE.
42. MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL COMPONENTS AND INSTALLATION OF ADDITIONAL EROSION AND SEDIMENT CONTROL COMPONENTS SHALL BE AN ONGOING PRACTICE AND IN STRICT ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
43. PERFORM AS-BUILT SURVEY AND SUBMIT AS-BUILT AND RECORD DRAWINGS.
44. TRAIN OWNER'S REPRESENTATIVES IN MAINTENANCE AND OPERATIONS OF THE FACILITY.
45. COMPLETE PROJECT PUNCH LIST.
46. SUBMIT ALL REQUIRED DOCUMENTATION, INCLUDING BUT NOT LIMITED TO WARRANTIES, MAINTENANCE DOCUMENTS, RECORD DOCUMENTS, ETC.

GENERAL NOTES:

1. ALL SITE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL CPW/DPW SPECIFICATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO COMPLETE THE WORK.
3. ALL UTILITY SIZES, LOCATIONS, AND APPURTENANCES ARE SUBJECT TO THE APPROVAL AND/ OR REVISION OF THE RESPECTIVE UTILITY HAVING JURISDICTION.
4. NOTIFY "DIG-SAFE" (1-888-344-7233) AND THE LOCAL CPW/DPW TO VERIFY THE LOCATION, DEPTH AND SIZE OF THE EXISTING UTILITY SERVICE CONNECTIONS PRIOR TO CONSTRICTION.
5. THE CONTRACTOR IS RESPONSIBLE FOR LOAMING AND HYDROSEEDING AREAS DISTURBED BY CONSTRUCTION OPERATIONS.
6. ALL MATERIAL TO BE REMOVED MUST BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
7. ALL EXISTING UTILITIES SHALL BE PROTECTED UNLESS OTHERWISE SPECIFIED.
8. ALL EROSION CONTROL TO BE INSTALLED PRIOR TO ANY OTHER WORK ON THE SITE.
9. WALKWAY CROSS SLOPES, AS INDICATED IN THE STANDARD SPECIFICATIONS, WILL BE AT 1.6% MAXIMUM, 1.5% PREFERRED, IN ACCORDANCE WITH THE ARCHITECTURAL ACCESS BOARD (AAB) RULES AND REGULATIONS. THE SIDEWALK CROSS SLOPE CANNOT EXCEED 2.0%.
10. ANY ALTERATIONS REQUIRED ON THESE DRAWINGS DURING CONSTRUCTION SHALL BE APPROVED BY THE PROJECT ENGINEER AND THE TOWN/CITY PRIOR TO CONSTRUCTION AND SHALL BE RECORDED ON THE "AS-BUILT" DRAWINGS.
11. THE CONTRACTOR SHALL COORDINATE ALL WORK AND TIME SCHEDULES WITH THE TOWN/CITY AND THEIR REPRESENTATIVES.

DIMENSIONS AND QUANTITIES:

1. ALL DIMENSIONS AND QUANTITIES SHALL BE DETERMINED OR VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY THE DRAWING SCALE AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY INACCURACIES.
3. THE INFORMATION ON THE CONTRACT DRAWINGS HAS BEEN COMPILED FROM VARIOUS SOURCES AND MAY NOT REFLECT THE ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS AND MAKE ALL INVESTIGATIONS NECESSARY TO PERFORM THE WORK. THE OWNER WILL NOT CONSIDER UNFAMILIARITY WITH THE PROJECT AS A BASIS FOR ADDITIONAL COMPENSATION.

PROTECTION NOTES:

1. ADEQUATE PROTECTION OF PERSONS AND PROPERTY SHALL BE PROVIDED AT ALL TIMES. THE WORK SHALL BE EXECUTED IN SUCH A WAY AS TO AVOID HAZARD TO PERSONS AND PROPERTY. WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL, STATE AND FEDERAL AUTHORITIES HAVING JURISDICTION OVER THE WORK.
2. PROVIDE ALL NECESSARY TEMPORARY PROTECTION AND BARRIERS TO SEGREGATE THE WORK AREA AND TO PREVENT DAMAGE TO ADJACENT AREAS.
3. PROVIDE PROPER PROTECTION AND BARRIERS BETWEEN THE WORK OF THE CONTRACT AND THE EXISTING STRUCTURES TO REMAIN.
4. PROVIDE MAXIMUM SECURITY IN TERMS OF PREVENTION OF FIRE AND OTHER HAZARDS.

PERMIT ADVISORY NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS AND APPROVALS INCIDENTAL TO THEIR SCOPE OF WORK, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

1. BUILDING PERMIT: FOR ALL CONSTRUCTION-RELATED ACTIVITIES, INCLUDING BUT NOT LIMITED TO GRADING, INSTALLATION OF LIGHT POLES, SCOREBOARD STRUCTURES, AND GOALPOSTS.
2. TRENCH PERMIT: FOR ANY EXCAVATION, TRENCHING, OR UNDERGROUND UTILITY INSTALLATIONS (INCLUDING DRAINAGE SYSTEMS, ELECTRICAL CONDUITS, ETC.).
3. ELECTRICAL PERMIT: FOR THE INSTALLATION OF LIGHTING SYSTEMS, ELECTRICAL PANELS, WIRING, AND RELATED INFRASTRUCTURE ASSOCIATED WITH THE TURF FIELD AND ASSOCIATED AMENITIES.
4. DRAINAGE PERMIT: FOR ANY DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT MEASURES REQUIRED FOR THE FIELD INSTALLATION, INCLUDING COLLECTION AND RUNOFF SYSTEMS.
5. RIGHT-OF-WAY PERMITS: IF REQUIRED FOR ANY WORK WITHIN PUBLIC ROADWAYS OR EASEMENTS RELATED TO FIELD INFRASTRUCTURE, LIGHT POLES, OR OTHER SYSTEMS.
6. TEMPORARY STRUCTURES PERMITS: FOR THE INSTALLATION OF TALL NETTING POLES, SCAFFOLDING, OR OTHER TEMPORARY STRUCTURES, AS REQUIRED BY LOCAL CODES.
7. NPDES PERMIT (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM): THE CONTRACTOR IS REQUIRED TO OBTAIN AND COMPLY WITH THE FEDERAL NPDES PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THIS PERMIT IS MANDATED BY THE EPA AND MUST BE SECURED PRIOR TO THE COMMENCEMENT OF ANY SITE DISTURBANCE OR CONSTRUCTION ACTIVITIES.
8. SWPPP (STORMWATER POLLUTION PREVENTION PLAN): IN CONJUNCTION WITH THE NPDES PERMIT, THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A SWPPP TO MANAGE AND MITIGATE STORMWATER RUNOFF, EROSION, AND SEDIMENTATION THROUGHOUT THE DURATION OF THE CONSTRUCTION. THE SWPPP MUST BE IN PLACE BEFORE ANY SITE DISTURBANCE OCCURS, AND THE CONTRACTOR MUST ENSURE FULL COMPLIANCE WITH ITS PROVISIONS.

NEW SHEET

ALL PERMITS MUST BE OBTAINED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, AND THE CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING THE FEDERAL NPDES REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATING INSPECTIONS, ENSURING ALL WORK IS DONE IN COMPLIANCE WITH APPROVED PERMIT CONDITIONS, AND MAINTAINING ALL NECESSARY DOCUMENTATION THROUGHOUT THE PROJECT.

THE PROJECT IS SUBJECT TO APPLICABLE MASSACHUSETTS LAWS, BUILDING CODES, AND ZONING ORDINANCES.

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COMMONWEALTH OF MASSACHUSETTS
PROFESSIONAL ENGINEER

PROJECT

MARSHALL SIMONDS MIDDLE SCHOOL ATHLETIC FIELDS RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

BURLINGTON PUBLIC SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

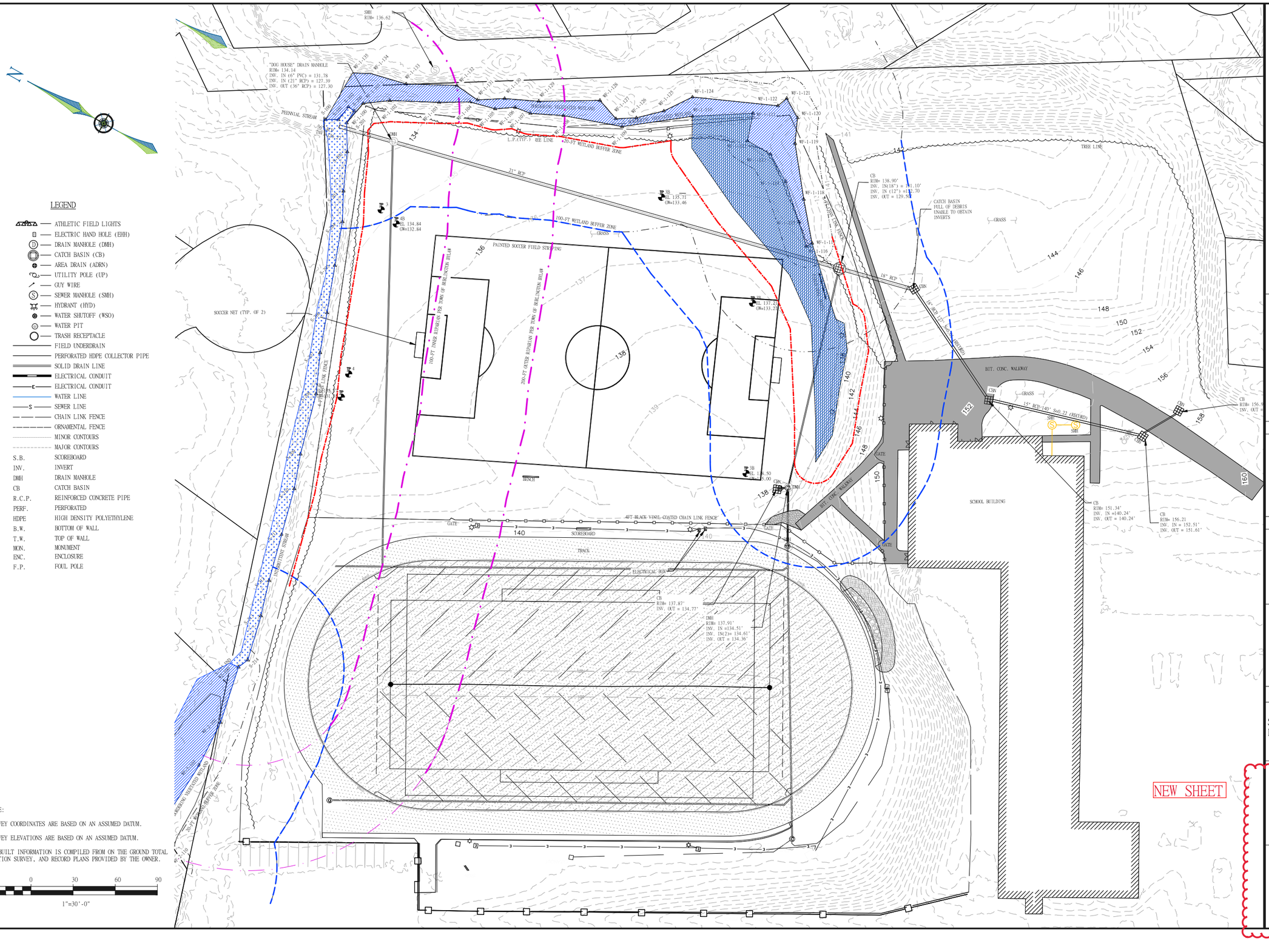
NO.	REVISION	DATE

SCALE - AS NOTED
DATE - 2/10/25

PERMIT SET

GENERAL NOTES

C-2


N
LEGEND
ATHLETIC FIELD LIGHTS
ELECTRIC HAND HOLE (EHH)
DRAIN MANHOLE (DMH)
CATCH BASIN (CB)
AREA DRAIN (ADRN)
UTILITY POLE (UP)
GUY WIRE
SEWER MANHOLE (SMH)
HYDRANT (HYD)
WATER SHUTOFF (WSO)
WATER PIT
TRASH RECEPTACLE
FIELD UNDERDRAIN
PERFORATED HDPE COLLECTOR PIPE
SOLID DRAIN LINE
ELECTRICAL CONDUIT
ELECTRICAL CONDUIT
WATER LINE
SEWER LINE
CHAIN LINK FENCE
ORNAMENTAL FENCE
MINOR CONTOURS
MAJOR CONTOURS
S.B. SCOREBOARD
INV. INVERT
DMH DRAIN MANHOLE
CB CATCH BASIN
R.C.P. REINFORCED CONCRETE PIPE
PERF. PERFORATED
HDPE HIGH DENSITY POLYETHYLENE
B.W. BOTTOM OF WALL
T.W. TOP OF WALL
MON. MONUMENT
ENC. ENCLOSURE
F.P. FOUL POLE
"DOG HOUSE" DRAIN MANHOLE
RIM= 134.14
INV. IN (6" PVC) = 131.78
INV. IN (21" RCP) = 127.39
INV. OUT (36" RCP) = 127.30
SMH
RIM= 136.62
PERENNIAL STREAM
L.P.(TYP.) 6FT LINK FENCE
SOCCER NET (TYP. OF 2)
PAINTED SOCCER FIELD STRIPING
100-FT INNER RIPARIAN PER TOWN OF BURLINGTON BYLAW
200-FT OUTER RIPARIAN PER TOWN OF BURLINGTON BYLAW
100-FT WETLAND BUFFER ZONE
20-FT WETLAND BUFFER ZONE
21" RCP
BENCH
4FT BLACK VINYL COATED CHAIN LINK FENCE
GATE
SCOREBOARD
TRACK
ELECTRICAL BOX
CB
RIM= 137.87'
INV. OUT = 134.77'
DMH
RIM= 137.91'
INV. IN =134.51'
INV. IN(2)= 134.61'
INV. OUT = 134.36'
CB
RIM= 138.90'
INV. IN(18") = 131.10'
INV. IN (12") =132.70
INV. OUT = 129.50
CATCH BASIN
FULL OF DEBRIS
UNABLE TO OBTAIN
INVERTS
TREE LINE
GRASS
18" RCP
15" RCP, 140' S=0.23 (RECORD)
BIT. CONC. WALKWAY
SCHOOL BUILDING
BIT. CONC. WALKWAY
CB
RIM= 151.34'
INV. IN =140.24'
INV. OUT = 140.24'
CB
RIM= 156.21
INV. IN = 152.51'
INV. OUT = 151.61'
CB
RIM= 156.9
INV. OUT
ISOLATED VEGETATED WETLAND
30-FT BUFFER ZONE
S-414
S-415
S-416
S-417
S-418
S-419
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S-423
S-424
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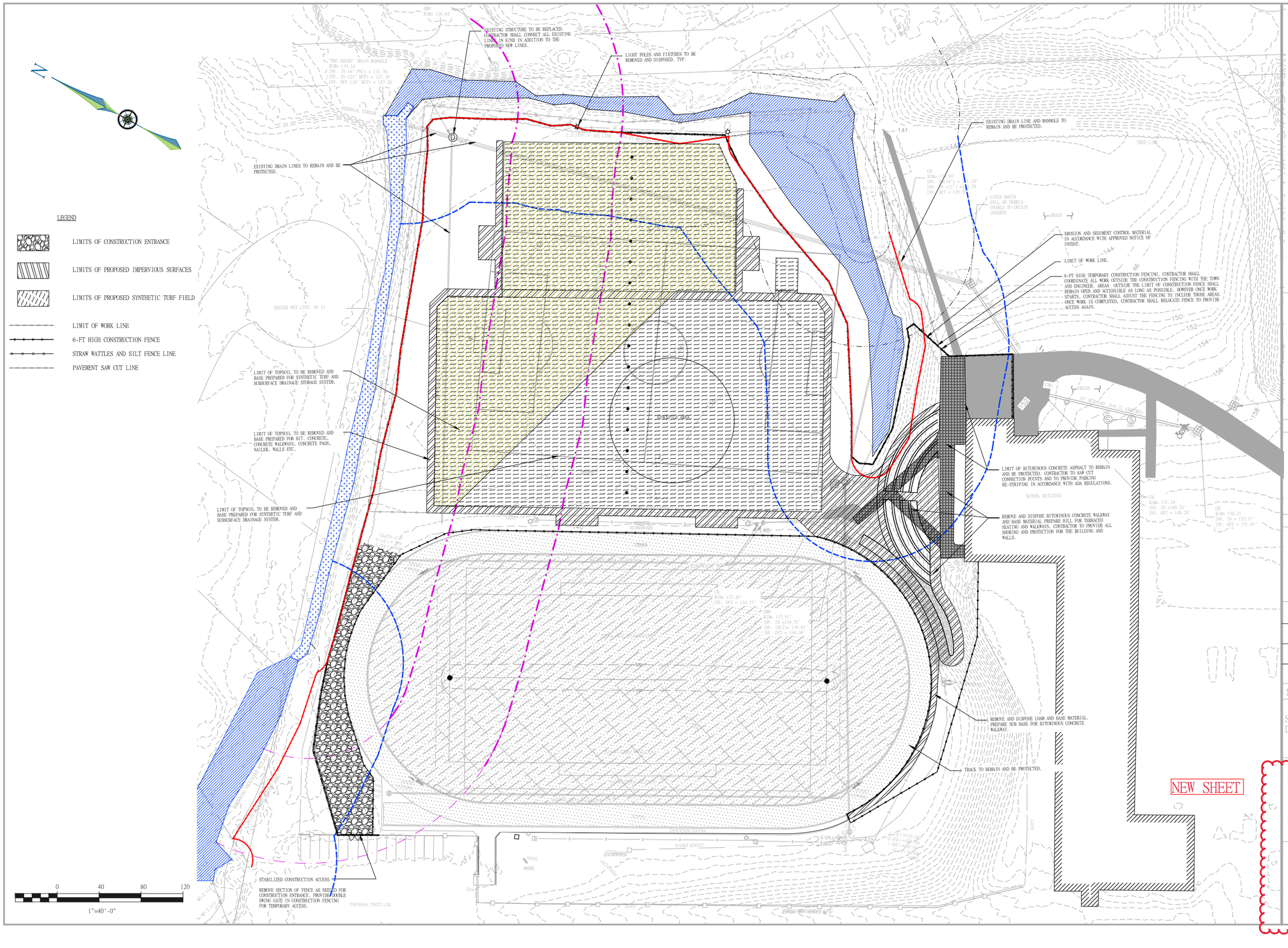

NEW SHEET

NESRA ENGINEERING
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607-506-3772
829 SOUTH WASHINGTON STREET
NORTH ATTLEBORO
MASSACHUSETTS 02760
MA RI NH ME FL

PROJECT

MARSHALL SIMONDS MIDDLE SCHOOL ATHLETIC FIELDS RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

BURLINGTON PUBLIC SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

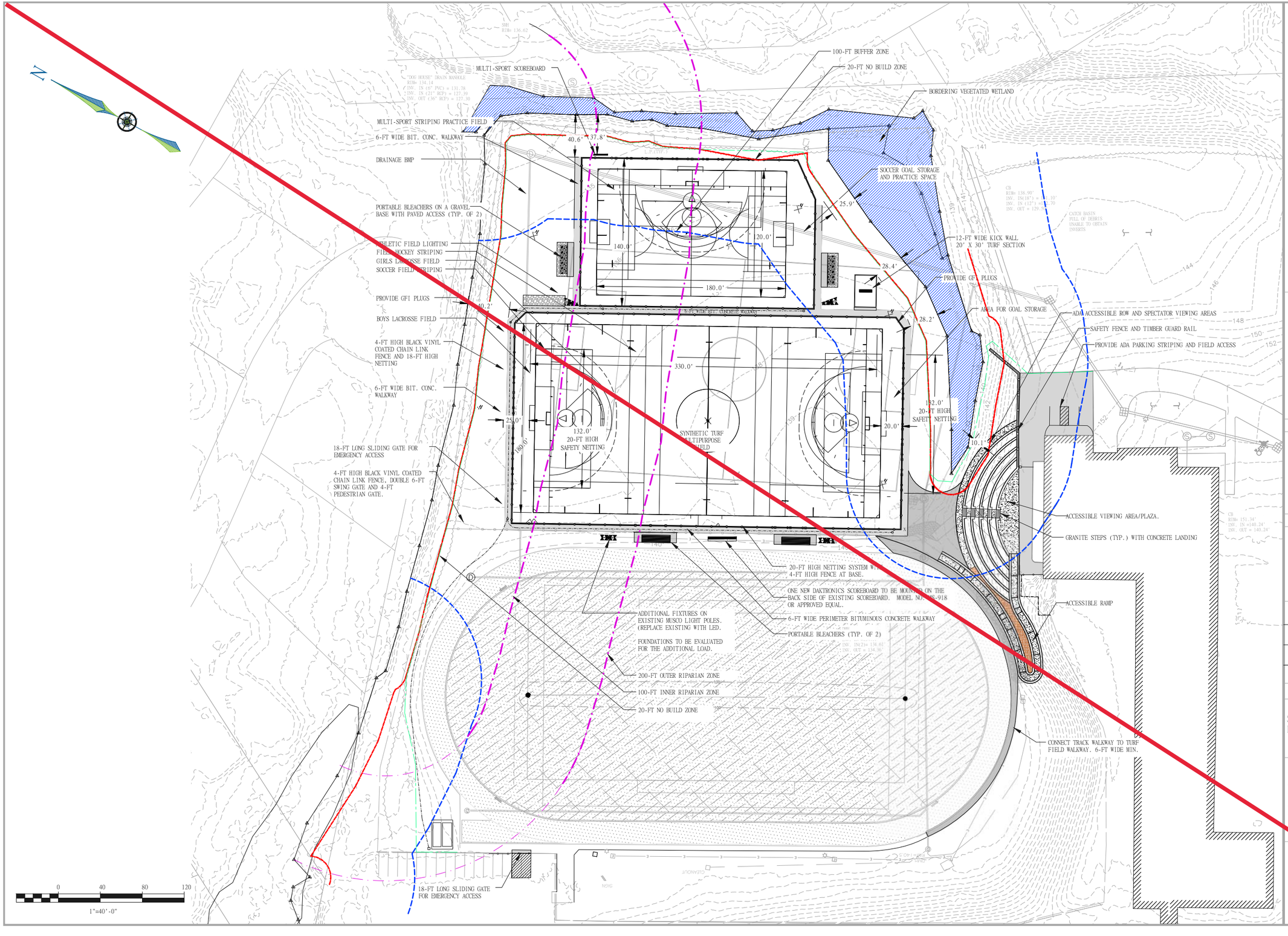
NO.	REVISION	DATE
4.	UPDATE 11-13-25 MEETING CHANGES	1/2/25
3.	UPDATE 8-12-25 MEETING CHANGES	9/22/25
2.	UPDATE 7-10-25 MEETING CHANGES	8/5/25
1.	UPDATE WETLAND LINE. REVISE DESIGN	5/6/25

SCALE - 1"=30'
DATE - 2/10/25

PERMIT SET

DEMOLITION AND EROSION CONTROL PLAN

C-4



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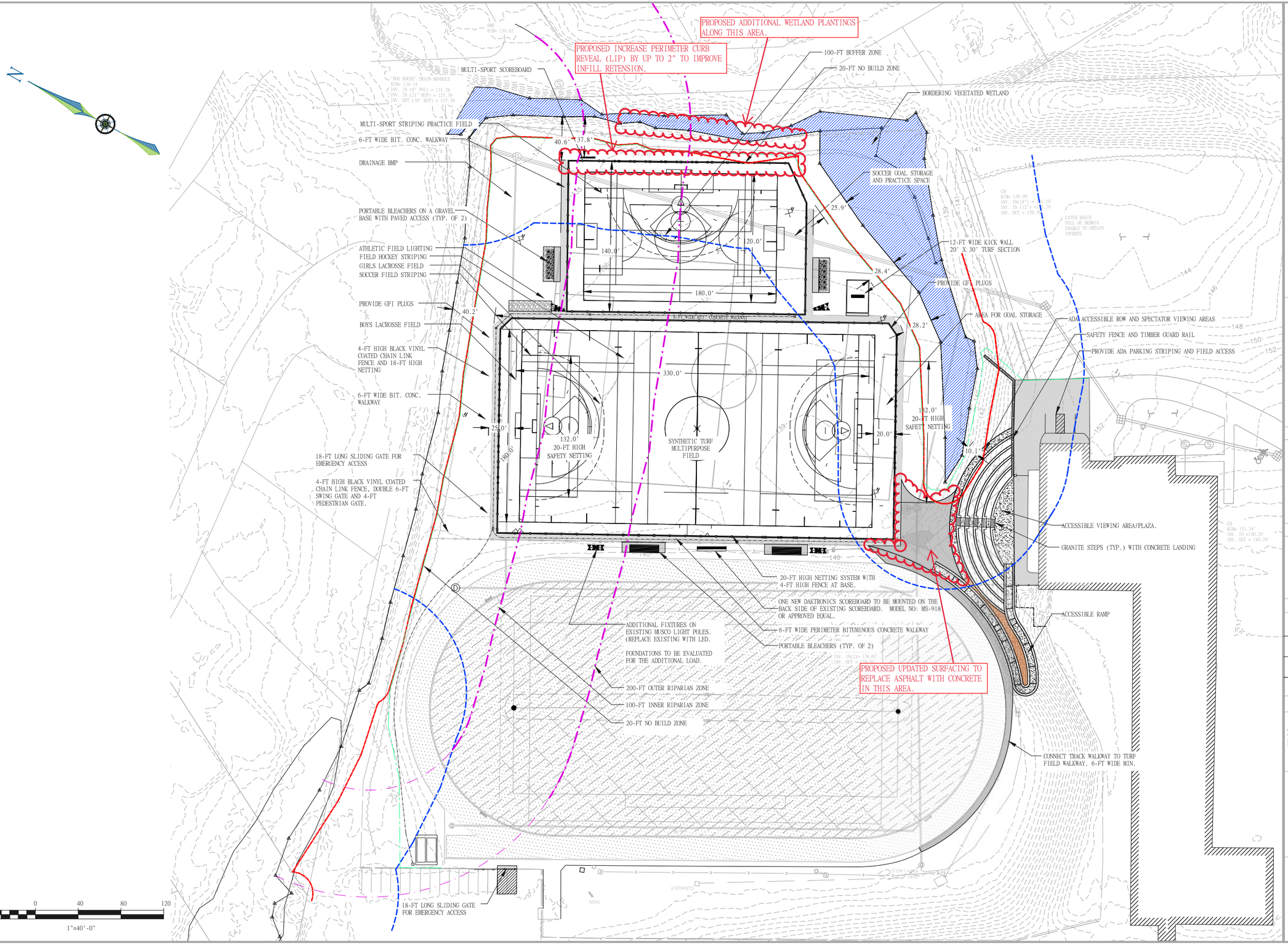
DATE - 2/10/25

PERMIT SET

LAYOUT, AND MATERIALS PLAN

C-5



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BURLINGTON PUBLIC SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

NO.	REVISION	DATE
5.	UPDATE 1-8-26 MEETING CHANGES	1/13/25
4.	UPDATE 11-13-25 MEETING CHANGES	1/2/25
3.	UPDATE 8-12-25 MEETING CHANGES	9/22/25
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DATE - 2/10/25

PERMIT SET

LAYOUT, AND MATERIALS PLAN

C-5

WETLAND TO BE ALLOWED TO RESTORE, 12,549 S.F.

20 FT NO DISTURB BUFFER ZONE RESTORATION AREA, 11,371 S.F. SEE PLANTING PLAN

RIVERFRONT RESTORATION AREA 27,093 S.F. SEE PLANTING PLAN

SNOW SHALL NOT BE STOCKPILED IN THE RIVERFRONT AREA OR THE RAIN GARDEN.

GRADING AREAS ADJUSTED AND RAIN GARDEN RELOCATED.

SNOW STOCKPILE LOCATIONS

RAIN GARDEN, SEE PLANTING PLAN

0 40 80 120

1"=40'-0"

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DATE - 2/10/25

PERMIT SET

GRADING PLAN

C-6

REPLACE EXISTING DOG HOUSE MANHOLE WITH A NEW 8' Ø DRAIN MANHOLE
RE-CONNECT EXISTING 21" RCP AND 6" PVC
CONNECT NEW 12" HDPE OUTLET PIPE
RIM= 135.29
INV. IN (6"PVC)=131.78 (EX)
INV. IN (21" RCP)=127.39 (EX)
INV. A (12" HDPE) = 132.00
INV. OUT (21" RCP)=127.30 (EX)

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.12
INV.OUT = 136.62

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.43
INV. IN = 136.57
IN = 136.57
INV.OUT = 136.57

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.49
INV. IN = 136.49
INV.OUT = 136.49

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.32
INV. IN = 136.33
INV.OUT = 136.33

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.32
INV. IN = 136.29
INV.OUT = 136.29

RAIN GARDEN OUTLET CONTROL STRUCTURE. 30" NYLOPLAST CB
PROVIDE DOME GRATE
INLET = 135.80
INV. = 133.35
INV. OUT = 133.00

MONITORING WELL FOR SAMPLING IF NEEDED.

FLARED END OUTLET WITH RIP RAP
INV. = 136.00

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.32
INV. IN = 136.14
INV.OUT = 136.14

RAIN GARDEN WITH PERFORATED SUB-DRAIN
SEE DETAIL

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 138.95
NV. IN = 136.95
INV.OUT = 136.95

¾" QUICK COUPLER VALVE IN TURF BOX. TYPICAL OF FOUR.

PROVIDE 2" IRRIGATION LINE FOR QUICK CONNECTS.

TERMINATE IRRIGATION LINE IN IRRIGATION BOX FOR FUTURE CONNECTION.

UTILITY INVERTS AND STONE BEDDING REVISED TO ACCOMMODATE INCREASED COMPENSATORY STORAGE WITHIN FIELD LIMITS.

DOUBLE WASHED CRUSHED STONE
STORAGE AREA BOTTOM OF SYSTEM
ELEVATION = 135.75
56,000 S.F.
BOTTOM OF SAND FILTER = 135.50

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 139.19
INV.(12" HDPE)=137.19

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 139.54
INV.(12" HDPE)=137.54

3-FT Ø NYLOPLAST DMH
RIM=TOP OF STONE
FINISHED GRADE 140.21
INV.(12" HDPE)=138.21

INV. IN=136.30

CB
4-FT Ø PRECAST CONC.
RIM=140.05
INV.OUT (12"HDPE)=136.50

12" SOLID HDPE PIPE
6" PERF. HDPE PIPE
12" FLAT PANEL DRAIN PIPE 25-FT O.C. (TYP.)
10" PERF. HDPE PIPE
4" PERF. HDPE PIPE
12" PERF. HDPE PIPE
CONNECT FLAT PANEL DRAIN TO COLLECTOR PIPE (TYP.)

0 40 80 120
1"=40'-0"

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PROJECT

MARSHALL SIMONDS
MIDDLE SCHOOL
ATHLETIC FIELDS
RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

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123 CAMBRIDGE STREET
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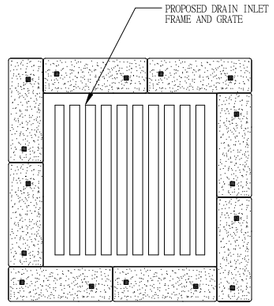
PERMIT SET

DRAINAGE AND UTILITY PLAN

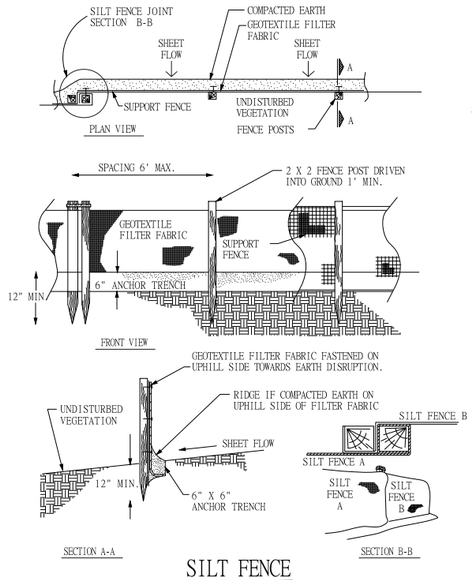
C-7



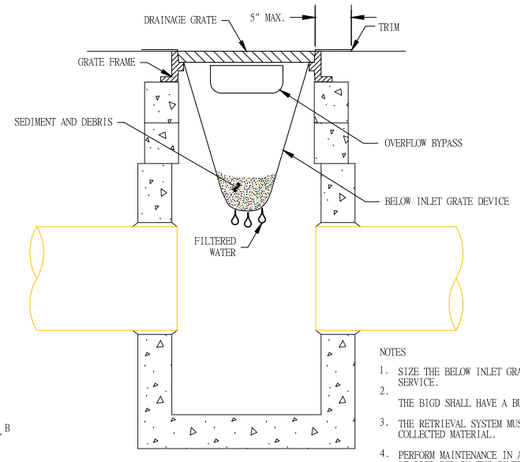
NOTES:

1. BALES SHALL BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
3. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

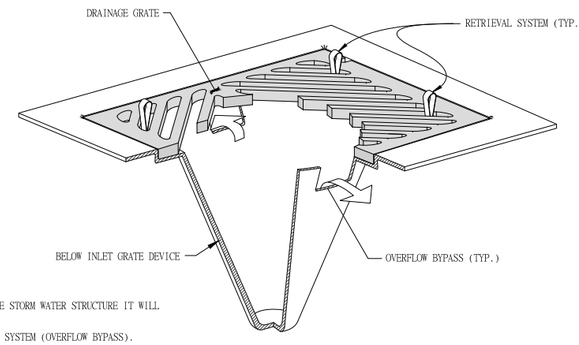
CATCH BASIN STRAW BALE FILTER DETAIL
N.T.S.



SILT FENCE
N.T.S.



SECTION VIEW

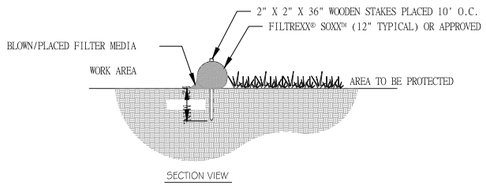


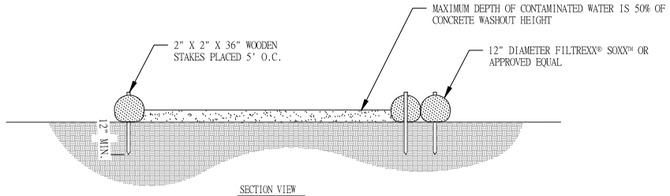
ISOMETRIC VIEW

NOTES

1. SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
2. THE BIGD SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
3. THE RETRIEVAL SYSTEM MUST ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH STORMWATER POLLUTION PREVENTION PLAN, TO BE PREPARED BY THE CONTRACTOR.

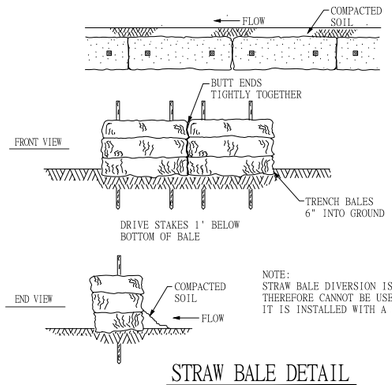
STORM DRAIN INLET PROTECTION
N.T.S.





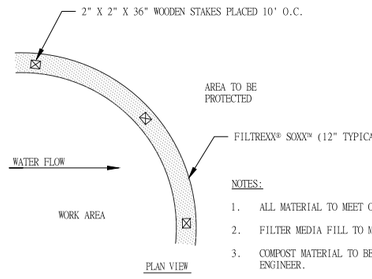
NOTES:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY
3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION



NOTE:
STRAW BALE DIVERSION IS NOT PERMEABLE AND THEREFORE CANNOT BE USED AS A FILTER UNLESS IT IS INSTALLED WITH A STONE OUTLET FILTER.

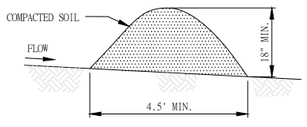
STRAW BALE DETAIL
N.T.S.



NOTES:

1. ALL MATERIAL TO MEET OR EXCEED FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

SEDIMENT CONTROL
N.T.S.



TEMPORARY DIVERSION DIKE
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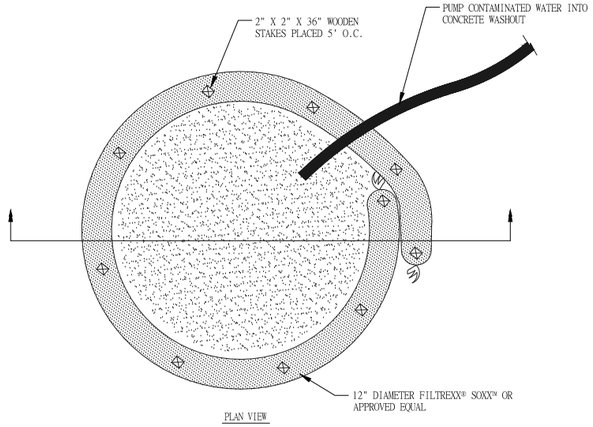
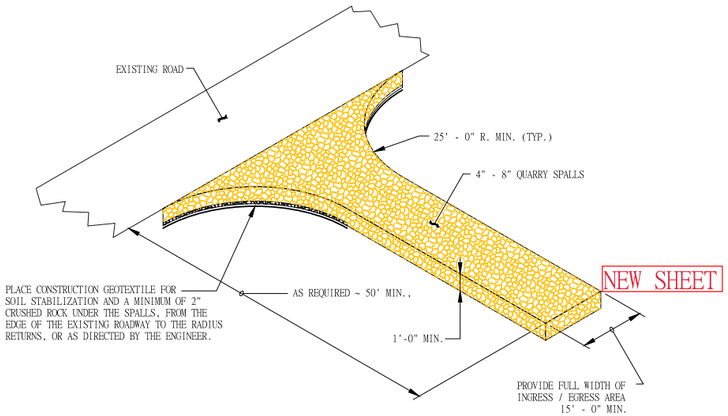


CONCRETE WASHOUT STATION
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

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829 SOUTH WASHINGTON STREET — NORTH ATTLEBORO — MASSACHUSETTS 02760
MA RI NH ME FL
607-506-3772
WWW.NESRAENG.COM

PROJECT

MARSHALL SIMONDS
MIDDLE SCHOOL
ATHLETIC FIELDS
RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

BURLINGTON PUBLIC
SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

NO.	REVISION	DATE

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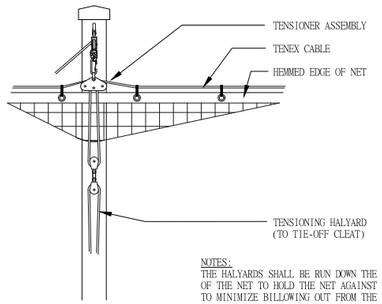
CONSTRUCTION DETAILS

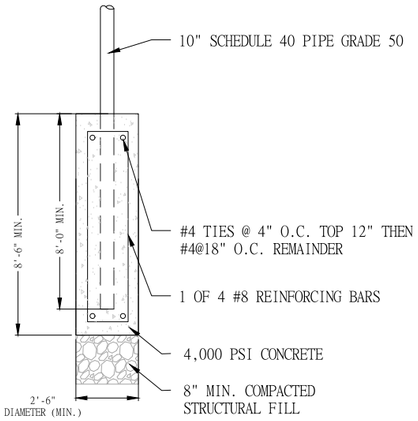
C-8



NOTES:
THE HALYARDS SHALL BE RUN DOWN THE FIELD SIDE OF THE NET TO HOLD THE NET AGAINST THE POSTS TO MINIMIZE BILLOWING OUT FROM THE WIND.

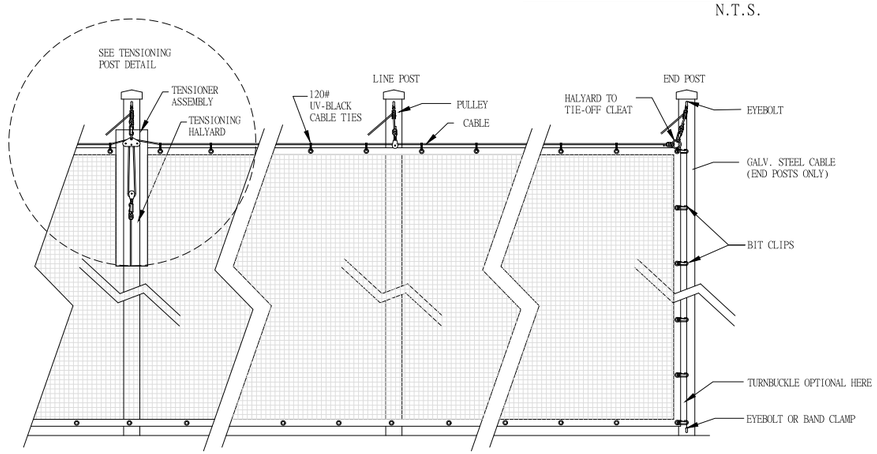
TENSIONING POST DETAIL

N.T.S.



NETTING FOOTING DETAIL

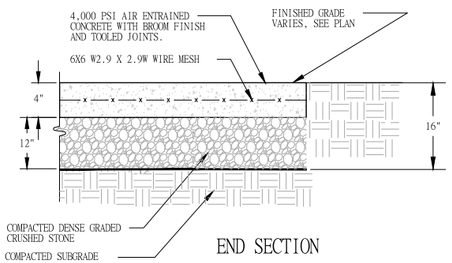
N.T.S.



NOTES:
1. #36 BLACK KNOTLESS NYLON ~ 180-LB. BREAK STRENGTH
2. 4" SQUARE MESH BLACK, BOUND ON ALL EDGES - UV TREATED
3. VINYL HEMS AND GROMMETS SPACED EVERY FOOT ON ALL SIDES OF EACH PANEL

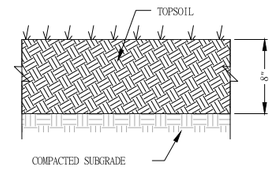
PROTECTIVE NETTING SYSTEM

N.T.S.



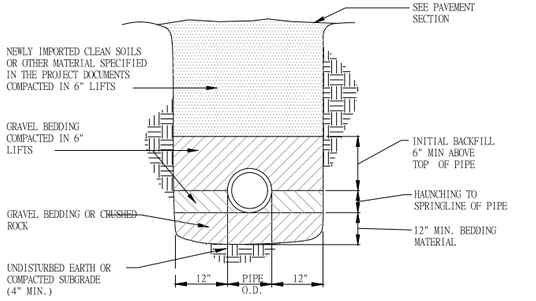
TYPICAL CONCRETE PAD DETAILS

N.T.S.



LOAM AND SEED DETAIL

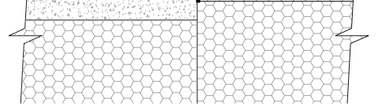
N.T.S.



NOTE:
1. CONTRACTOR SHALL PROVIDE SHEETING, TRENCH BOX OR SLOPED WALLS IN ACCORDANCE WITH APPLICABLE SAFETY REGULATIONS.
2. CONTRACTOR TO PROVIDE A 3-FT WIDE "CLEAN" UTILITY CORRIDOR, FREE OF CONTAMINATED SOILS AND DELETERIOUS MATERIAL.

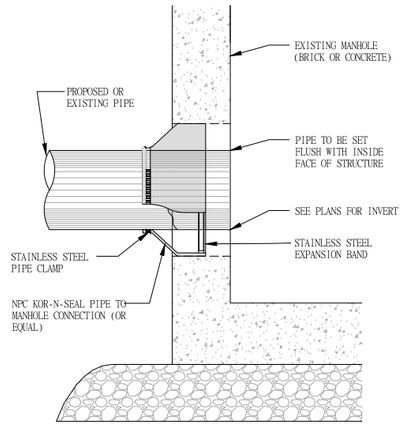
HDPE TRENCH DETAIL FOR SOLID PIPE (UP TO 24" DIA)

N.T.S.



CONCRETE TO PAVEMENT DETAIL

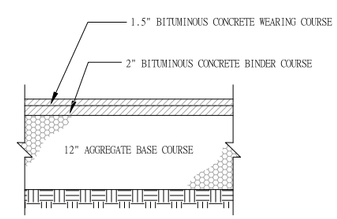
N.T.S.



NOTES:
1. ALL METAL FIXTURES SHALL BE STAINLESS STEEL
2. SERVICE LINE SHALL BE FLUSH WITH THE INSIDE OF THE MANHOLE.
3. FOR PROPOSED MANHOLE INSTALLATION AT EXISTING PIPE, CONTRACTOR SHALL EXTEND PIPE INTO NEW MANHOLE USING A SPOOL PIECE OF SAME PIPE MATERIAL WITH FERNCO COUPLES..

CONNECTION TO EXISTING MANHOLE

N.T.S.



BIT. CONC. PAVEMENT

N.T.S.

NEW SHEET

NESRA ENGINEERING
829 SOUTH WASHINGTON STREET — NORTH ATTLEBORO, MASSACHUSETTS 02760
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MA RI NH ME FL

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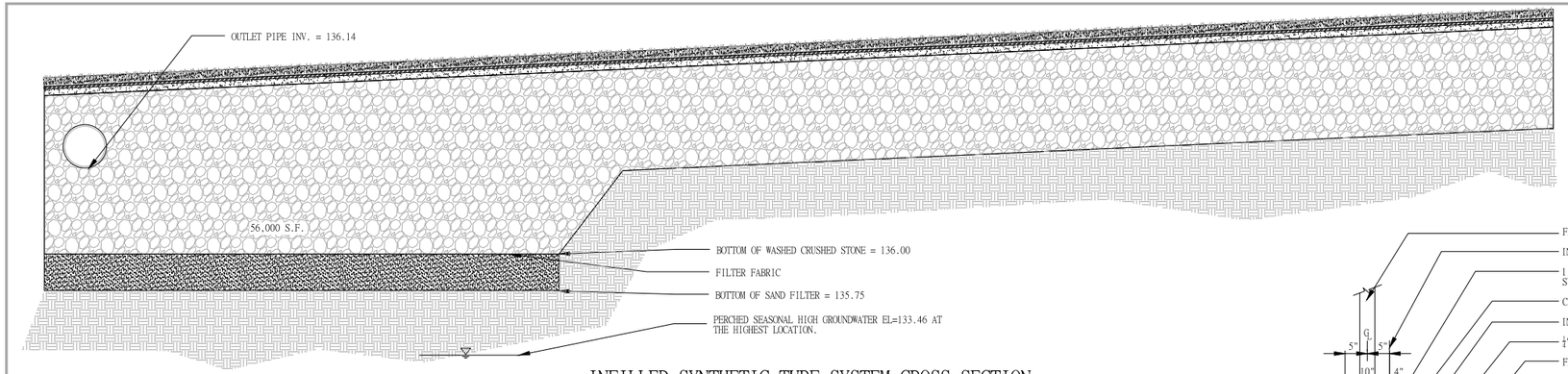
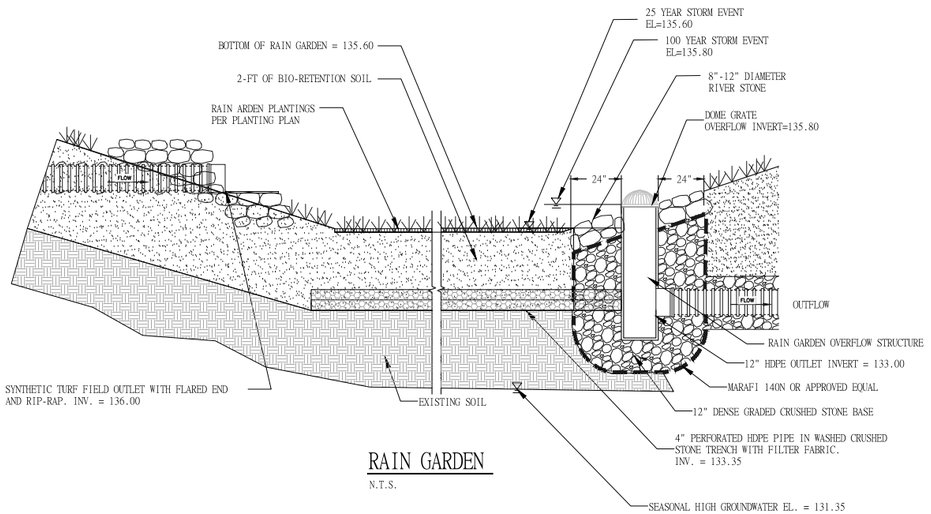
CONSTRUCTION DETAILS

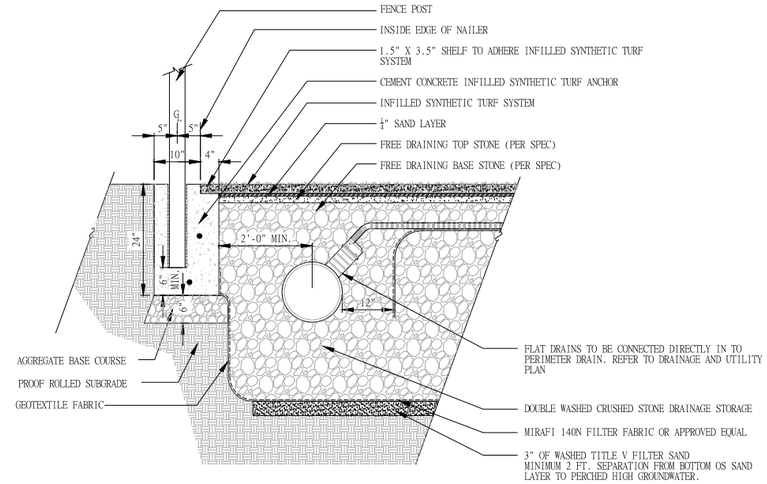
C-9



INFILLED SYNTHETIC TURF SYSTEM CROSS SECTION
N.T.S.

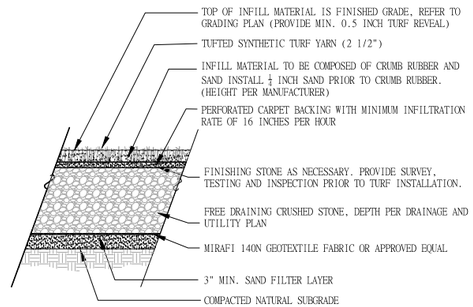


RAIN GARDEN
N.T.S.

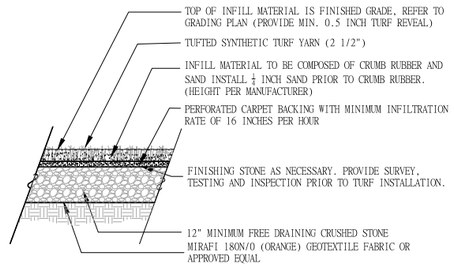


NOTE: ALTERNATIVELY TO THE CORED FENCE POST IN THE NAILER, CONTRACTOR MAY PROVIDE 4-FT DEEP TRADITIONAL FENCE POSTS AND FORM A 18" DEEP BY 14" WIDE NAILER WITH THE FENCE POSTS SET SINSIDE. CONTRACTOR TO PROVIDE A SUBMITTAL FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

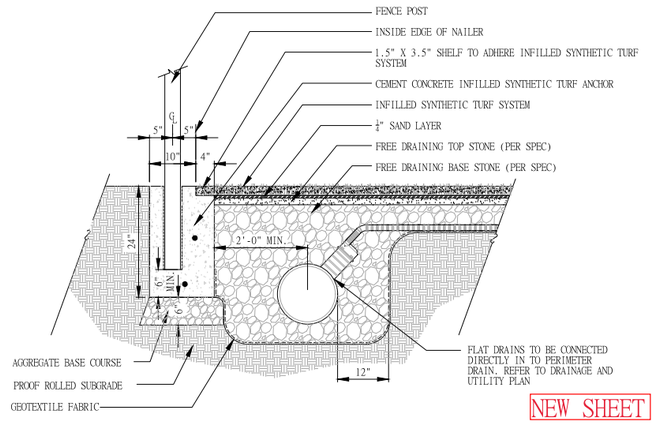
6-FT HIGH CHAIN LINK FENCE IN TURF ANCHOR WITH COLLECTOR PIPE IN STORAGE DETAIL
N.T.S.



INFILLED SYNTHETIC TURF SYSTEM AT STORAGE AREA DETAIL
N.T.S.



INFILLED SYNTHETIC TURF SYSTEM DETAIL
N.T.S.



NEW SHEET

NOTE: ALTERNATIVELY TO THE CORED FENCE POST IN THE NAILER, CONTRACTOR MAY PROVIDE 4-FT DEEP TRADITIONAL FENCE POSTS AND FORM A 18" DEEP BY 14" WIDE NAILER WITH THE FENCE POSTS SET SINSIDE. CONTRACTOR TO PROVIDE A SUBMITTAL FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

6-FT HIGH CHAIN LINK FENCE IN TURF ANCHOR DETAIL
N.T.S.

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829 SOUTH WASHINGTON STREET — NORTH ATTLEBORO, MASSACHUSETTS 02760
MA RI NH ME FL
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607-506-3772

PROJECT
MARSHALL SIMONDS MIDDLE SCHOOL ATHLETIC FIELDS RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT
BURLINGTON PUBLIC SCHOOLS
123 CAMBRIDGE STREET
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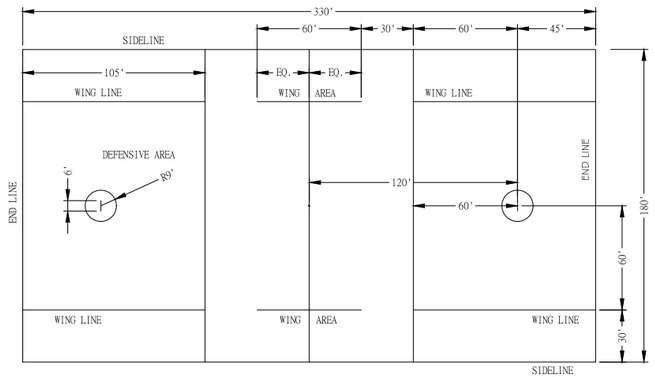
CONSTRUCTION DETAILS

C-10

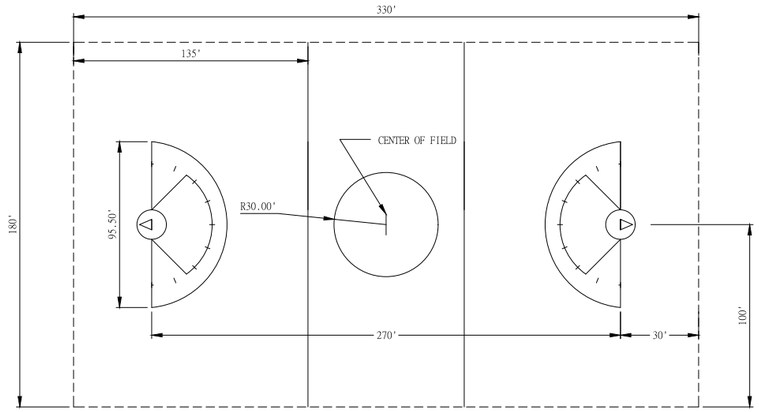


MEN'S LACROSSE STRIPING DETAIL

N.T.S.

GENERAL NOTE:

ALL FIELD STRIPING DIMENSIONS AND LAYOUT DIAGRAMS TO BE SUBMITTED BY TURF INSTALLER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. TURF SHALL NOT BE ORDERED OR MANUFACTURED UNTIL WRITTEN APPROVAL OF LAYOUT DIMENSIONS, COLORS, LOGOS, ETC. IS OBTAINED BY THE TURF INSTALLER. TURF INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE APPROVED SUBMITTALS AND GOVERNING BODY. WHERE VARIATIONS ARE OBSERVED FROM THE GOVERNING BODY THE OWNER AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

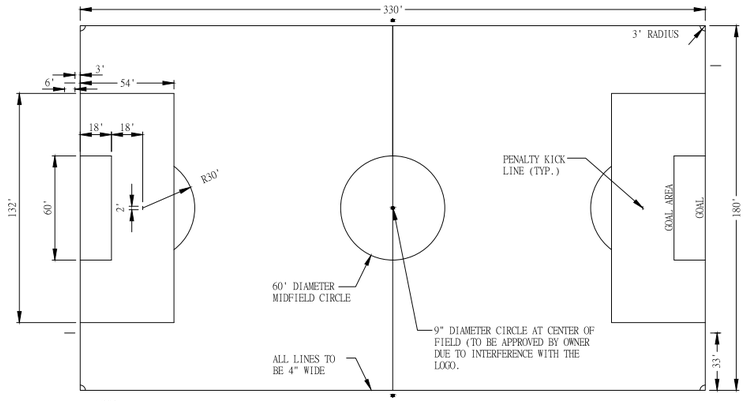


NOTE:

1. HIGH SCHOOL WOMEN'S LACROSSE FIELD STRIPING TO BE PAINTED. COLOR SHALL BE RED. TURF SUPPLIER SHALL CONFIRM ALL DIMENSIONS TO ENSURE COMPLIANCE WITH NFSHS STANDARDS.

WOMEN'S LACROSSE STRIPING DETAIL

N.T.S.

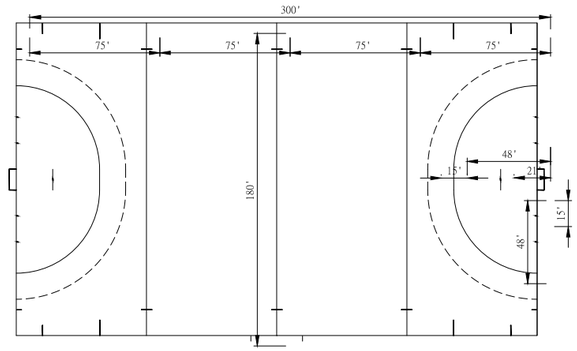


NOTE:

1. HIGH SCHOOL SOCCER FIELD TO BE PAINTED. COLOR SHALL BE YELLOW. TURF SUPPLIER SHALL CONFIRM ALL DIMENSIONS TO ENSURE COMPLIANCE WITH NFSHS STANDARDS.

SOCCER STRIPING DETAIL

N.T.S.



FIELD HOCKEY STRIPING DETAIL

N.T.S.

NEW SHEET

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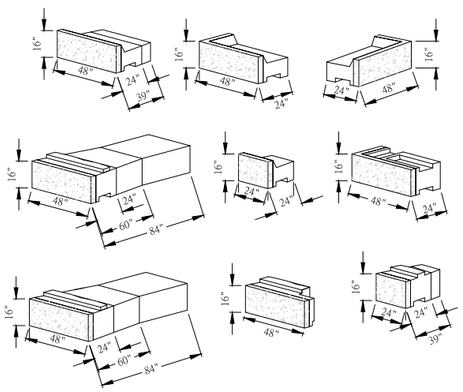
CONSTRUCTION DETAILS

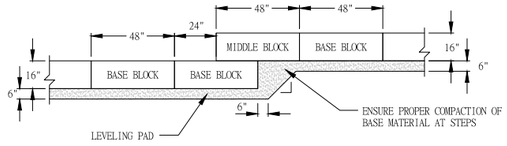
C-11

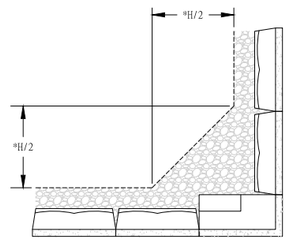
NOTE:
THE WALL FACE SHOWN IS FROM STANDARD AND DIAGRAMTIC ONLY. CONTRACTOR SHALL REFER TO PLANS AND SPECIFICATIONS REGARDING ACTUAL FINISH, TEXTURE, STYLE, TYPE, STAINING, AND COATING.

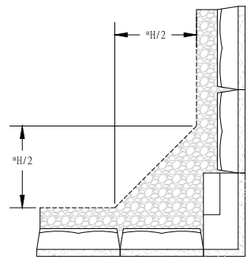


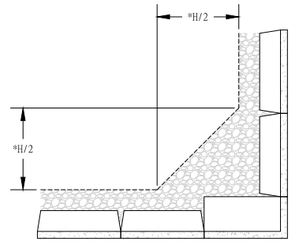
RECON BLOCK LEGEND	

NOTE: BLOCK MUST BE PLACED ON A MINIMUM 6" THICK LEVELING PAD CONSISTING OF ¾" CRUSHED STONE, CLASS 5, OR LEAN CONCRETE AS SPECIFIED IN THE SITE SPECIFIC PLANS DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. CONTRACTOR SHALL SUBMIT TO THE PROJECT ENGINEER STAMPED DESIGN PLANS BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN MASSACHUSETTS FOR THE SPECIFIC WALL SYSTEM TO BE UTILIZED FOR REVIEW AND APPROVAL.









*NOTE: IT IS RECOMMENDED THAT THE DRAINAGE STONE ZONE BE EXPANDED IN THE CORNER TO A MINIMUM H/2 (OR GREATER AS SPECIFIED PER THE ENGINEER), WHERE 'H' IS EQUAL TO THE TOTAL WALL HEIGHT AT THE CORNER.


R-MIDDLE (16" DEPTH)

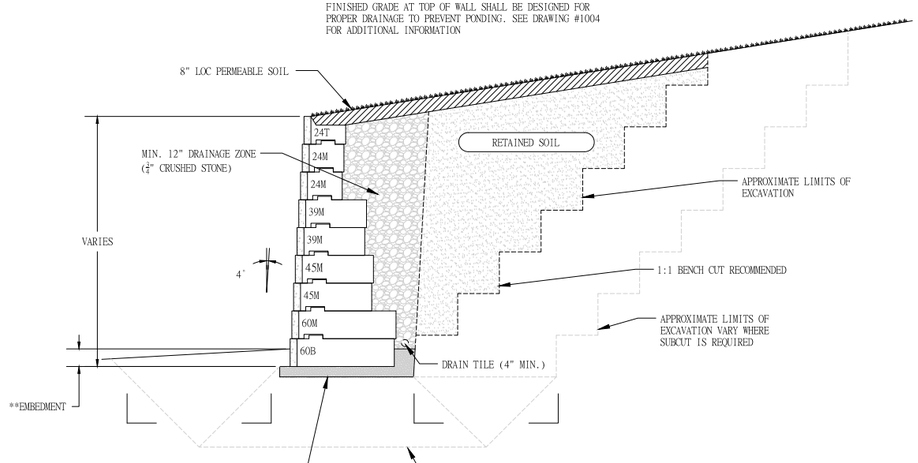

REVERSIBLE CORNER BLOCK


R-TOP BLOCK

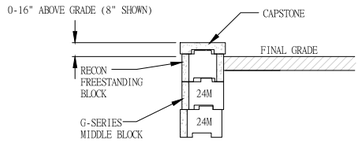

R - RIGHT CORNER TOP BLOCK


R - LEFT CORNER TOP BLOCK

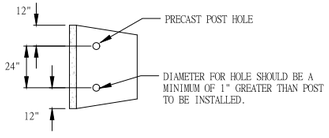
NOTE: WHEN BUILDING A WALL WITH AN OUTSIDE 90° CORNER, IT IS RECOMMENDED THAT CONSTRUCTION START AT THE CORNER AND EXTEND OUTWARD FROM THIS POINT IN BOTH DIRECTIONS. THIS ALLOWS FOR PLACEMENT OF THE CORNER BLOCKS SO THAT 1" OF SET BACK CAN BE MAINTAINED IN THE WALL IN BOTH DIRECTIONS. NO BLOCK CUTTING IS REQUIRED TO MAINTAIN THE 1" OF SET BACK PER ROW OF BLOCK ASSUMING THAT BOTH ENDS OF THE WALL RUNNING AWAY FROM THE 90° CORNER RUN OUT INTO GRADE. IN LIEU OF MAINTAINING THE 1" SET BACK AFTER TURNING A 90° CORNER, YOU CAN BUILD ONE SIDE OF THE CORNER (SAY "SIDE B") VERTICALLY WITHOUT THE 1" SET BACK PER ROW OF BLOCK. THIS WILL REQUIRE YOU TO CUT 1" OFF THE BACK OF THE TONGUE OF THE FIRST REGULAR BLOCK ADJACENT TO THE CORNER BLOCK IN EACH ROW ON SIDE B OF THE WALL. YOU CAN RE-ESTABLISH THE 1" SET BACK ON SIDE B GRADUALLY AS YOU MOVE OUT FROM THE CORNER. HOWEVER, THE ELIMINATION OF THE SET BACK MUST BE TAKEN INTO ACCOUNT IN THE DESIGN OF THE WALL BY THE REGISTERED PROFESSIONAL ENGINEER. *IN EITHER CASE, DURING INSTALLATION, IT IS RECOMMENDED THAT PL PREMIUM ADHESIVE BE APPLIED TO THE TOPS OF ALL REGULAR CORNER BLOCKS PRIOR TO INSTALLING THE NEXT ROW OF BLOCK.* IF ONE END OF THE WALL MUST END VERTICALLY BECAUSE IT ABUTS TO AN EXISTING VERTICAL STRUCTURE OR THE WALL HAS TWO OUTSIDE 90° CORNERS, THEN BLOCKS WILL NEED TO BE CUT TO MAINTAIN THE 1" SET BACK - IN THIS CASE REFER TO DRAWING # 311.



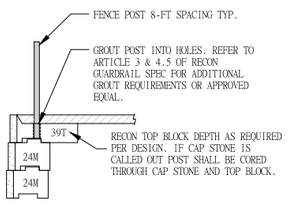
**EMBEDMENT SHOULD BE THE GREATER OF 6" OR H/20 FOR WALLS WITH LEVEL GRADE AT THE TOE. REFER TO RECON'S EMBEDMENT RECOMMENDATION DOCUMENT FOR ADDITIONAL INFORMATION FOR WALLS WITH A TOE SLOPE CONDITION.



CAP UNIT - SECTION VIEW



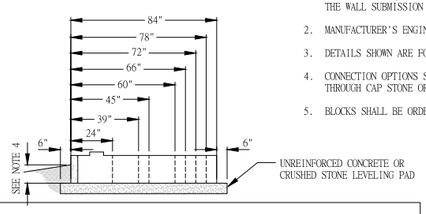
FENCE CONNECTION
PLAN VIEW



FENCE CONNECTION
SECTION VIEW

NOTES:

1. BLOCK MASS REQUIRED TO RESIST POST LOADING SHALL BE DETERMINED BY THE MANUFACTURER'S STRUCTURAL ENGINEER CERTIFYING THE WALL SUBMISSION FOR REVIEW.
2. MANUFACTURER'S ENGINEER TO PROVIDE ADEQUATE POST AND FINAL CONNECTION REQUIREMENTS.
3. DETAILS SHOWN ARE FOR POST TO BLOCK CONNECTION OPTIONS.
4. CONNECTION OPTIONS SHOWN ARE FOR POST TO TOP BLOCK. CONNECTION SHALL BE SIMILAR WHEN ATTACHING TO FULL HIGH CAP OR THROUGH CAP STONE OR OTHER BLOCKS.
5. BLOCKS SHALL BE ORDERED WITH PRECAST HOLES.



NOTES:
1. LEVELING PAD SHOULD BE AS SPECIFIED BY THE DESIGN ENGINEER IN THE PROJECT PLAN SET.
2. THE WIDTH OF THE LEVELING PAD MUST EXTEND 6" (MINIMUM) IN FRONT AND 6" (MINIMUM) IN BACK OF THE BASE BLOCK. AS A RESULT THE TYPICAL WIDTH OF LEVELING PAD WOULD BE:
   - 24" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 36"
   - 39" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 51"
   - 45" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 57"
   - 60" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 72"
   - 66" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 78"
   - 72" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 84"
   - 78" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 90"
   - 84" DEEP BASE BLOCK...LEVELING PAD WIDTH IS 96"
3. SET THE BASE BLOCK AND CHECK FOR LEVEL FROM FRONT TO BACK.
4. EMBEDMENT SHOULD BE THE GREATER OF 6" OR H/20 FOR WALLS WITH LEVEL GRADE AT THE TOE. REFER TO RECON'S EMBEDMENT RECOMMENDATION DOCUMENT FOR ADDITIONAL INFORMATION FOR WALLS WITH A TOE SLOPE CONDITION.
5. COMPACTION TO THE SPECIFIED EMBEDMENT DEPTH SHALL BE DONE IN FRONT OF THE BASE BLOCK BEFORE COMPACTION IS DONE BEHIND THE BASE BLOCK. THIS REDUCES THE CHANCE THAT COMPACTION BEHIND THE BASE BLOCK WILL ROLL THE BASE BLOCK FORWARD.
6. SEE BLOCK SPECIFICATION & INSTALLATION INSTRUCTIONS FOR MORE DETAILS.

NEW SHEET

STRUCTURAL NOTE:

1. CONTRACTOR SHALL SUBMIT STAMPED STRUCTURAL DRAWINGS FOR THE SPECIFIC WALL SYSTEM BEING PROPOSED FOR REVIEW AND APPROVAL BY THE PROJECT ENGINEER.

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CONSTRUCTION DETAILS

C-12

Marshall Simonds Plant List

Qty.	Code	Scientific Name	Common Name	Size/Container
2	AC	Amelanchier canadensis	Serviceberry	6-8' ht., multi-stem, B & B
1	AR	Acer rubrum	Red Maple	2 ½ -3" cal., B & B
10	CA	Clethra alnifolia	Sweet Pepperbush	3 gal. cont.
2	FA	Fraxinus americana	White Ash	2 ½-3" cal., B & B
15	IV	Ilex verticillata	Common Winterberry	5 gal. cont.
3	NS	Nyssa sylvatica	Black Tupelo	2 ½"-3" cal., B & B
3	PS	Prunus serotina	Black Cherry	2-2 ½-" cal., B & B
8	SS	Swida sericea	Red dogwood	5 gal. cont.
2	TC	Tsuga canadensis	Canadian hemlock	6-8' ht., B & B
1	QR	Quercus rubra	Northern Red Oak	2 ½-3" cal., B & B
18	VC	Vaccinium corymbosum	Highbush Blueberry	3 gal. cont.
15	VD	Viburnum dentatum	Northern Arrowwood	3 gal. cont.

3-NS
3-VD
1-FA
3-CA
3-PS
1-QR
2-VC
1-IV
3-VC
5-VC

ALL NON-SHRUB AREAS OF THE RAIN GARDEN SHALL BE SEEDED WITH ERNMX-137 SPECIALIZED WETLAND MIX FOR SHADED ORL/FACW AREAS AT A RATE OF 20 LB PER ACRE.

0 40 80 120
1"=40'-0"

NEW SHEET

NESRA ENGINEERING
WWW.NESRAENG.COM
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829 SOUTH WASHINGTON STREET
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MASSACHUSETTS 02760
MA RI NH ME FL

PROJECT

MARSHALL SIMONDS
MIDDLE SCHOOL
ATHLETIC FIELDS
RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

BURLINGTON PUBLIC
SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

NO.	REVISION	DATE

SCALE - 1"=40'
DATE - 1/5/26

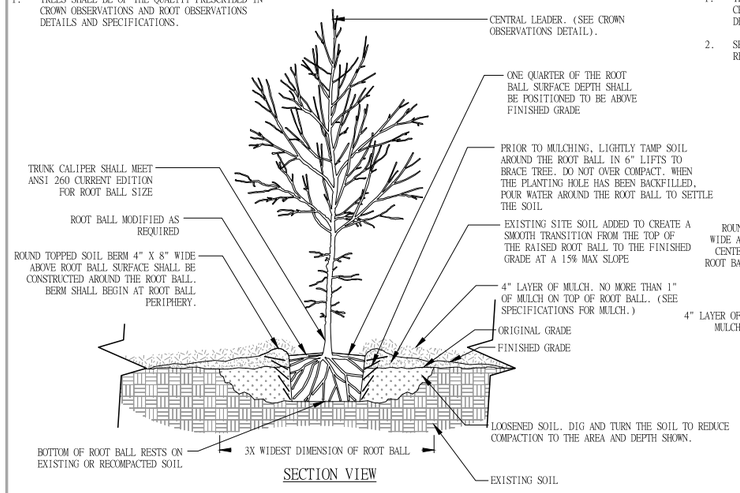
PERMIT SET

LANDSCAPE PLAN

L-1

NOTE:

1. TREES SHALL BE OF THE QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.



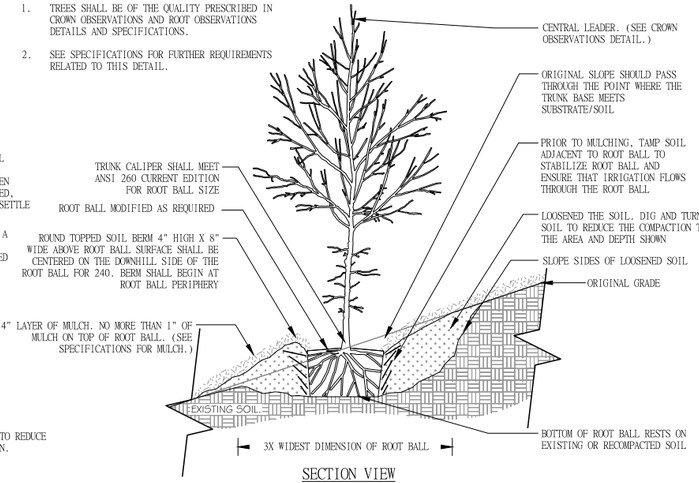
SECTION VIEW

TREE IN POORLY DRAINED SOIL

N.T.S.

NOTES:

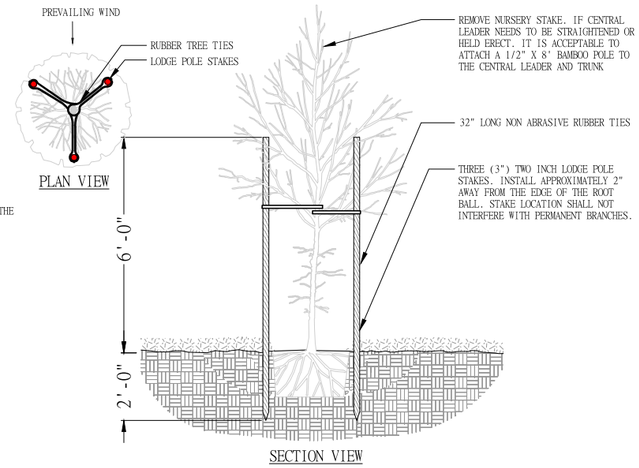
1. TREES SHALL BE OF THE QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



SECTION VIEW

TREE ON SLOPE 5% (20:1) TO 50% (2:1)

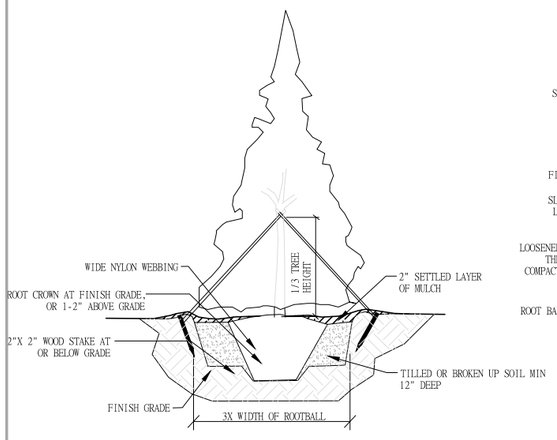
N.T.S.



SECTION VIEW

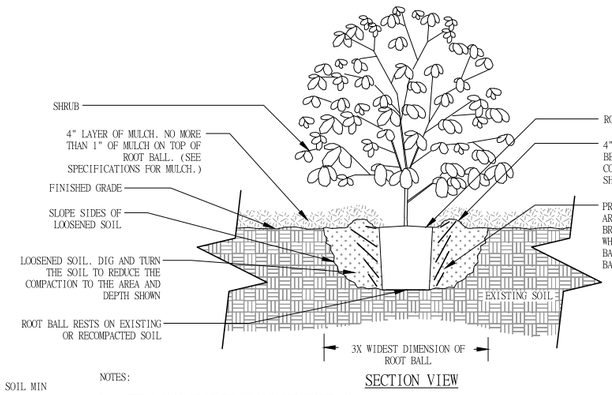
TREE STAKING - LODGE POLES (3)

N.T.S.



EVERGREEN TREE PLANTING

N.T.S.



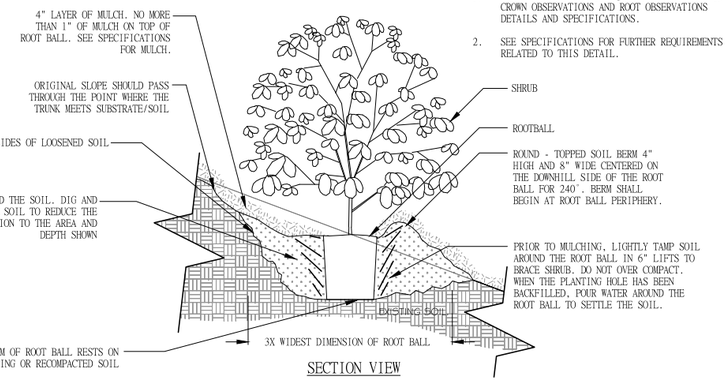
NOTES:

1. TREES SHALL BE OF THE QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

SECTION VIEW

SHRUB

N.T.S.



SECTION VIEW

SHRUB ON SLOPE 5% (20:1) TO 50% (2:1)

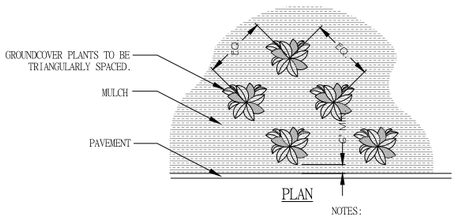
N.T.S.

NOTES:

1. TREES SHALL BE OF THE QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

NOTES:

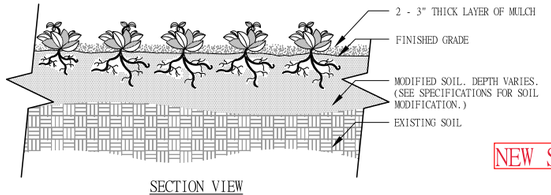
1. ALL PLANT MATERIALS SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PLANT ACCORDING TO ANSI A300 PART 6.
2. DIG THE PLANTING HOLE A MINIMUM OF 3 x WIDTH OF ROOTBALL FOR AT LEAST THE FIRST 12 INCHES OF DEPTH. BELOW 12 INCHES, DIG HOLE WIDE ENOUGH TO PERMIT ADJUSTING. DO NOT DIG THE HOLE DEEPER THAN ROOT BALL DEPTH.
3. SCARIFY THE SUBGRADE AND SIDES OF THE PLANTING HOLE WHEN PLANTING IN CLAY SOILS (MORE THAN 15% CLAY).
4. LIFT AND SET THE TREE BY ROOT BALL ONLY. DO NOT LIFT USING THE TREE TRUNK AND DO NOT USE TREE TRUNK AS A LEVER.
5. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE OR SLIGHTLY HIGHER IF THE SOIL IS PRONE TO SETTLING.
6. AFTER THE TREE IS SET IN PLACE, REMOVE BURLAP, WIRE AND STRAPS FROM AT LEAST THE UPPER 1/3 OF THE ROOTBALL.
7. BACKFILL WITH EXISTING SOIL THAT HAS BEEN WELL-TILLED OR BROKEN UP. DO NOT ADD AMENDMENTS TO THE BACKFILL SOIL. AMEND THE SURFACE WITH MULCH.
8. USE THREE 2" X 2" WOOD STAKES DRIVEN INTO UNDISTURBED SOIL A MINIMUM OF 16 INCHES. SPACE STAKES EQUALLY AROUND THE TREE.
9. ATTACH 3/4" NYLON WEBBING TO CONNECT THE TREE TO STAKES. ATTACH WEBBING AT 1/3 THE TREE HEIGHT.
10. APPLY A 2-3" (SETTLED) DEPTH OF BARK MULCH TO THE PLANTING SURFACE. LEAVE A 2" SPACE AROUND THE TRUNK FOR AIR CIRCULATION.
11. PRUNING SHALL BE LIMITED TO DEAD, DISEASED, OR BROKEN LIMBS ONLY AND SHALL BE IN ACCORDANCE WITH ANSI A300 SPECIFICATIONS.
12. REMOVE ANY TRUNK WRAP REMAINING AT TIME OF PLANTING. NO WRAPS SHALL BE PLACED ON TRUNK.



PLAN

NOTES:

1. SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2. SMALL ROOTS (1/4" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE. HOWEVER, THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOBED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL.)
3. SETTLE SOIL AROUND ROOT VBALL OF EACH GROUNDCOVER PRIOR TO MULCHING.



SECTION VIEW

GROUNDCOVER

N.T.S.

NEW SHEET

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MA RI NH ME FL — MASSACHUSETTS 02760

PROJECT

MARSHALL SIMONDS MIDDLE SCHOOL ATHLETIC FIELDS RENOVATION PROJECT
BURLINGTON, MA 01803

CLIENT

BURLINGTON PUBLIC SCHOOLS
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

NO.	REVISION	DATE

SCALE - AS NOTED
DATE - 2/10/25

PERMIT SET

PLANTING DETAILS

L-2

ELECTRICAL LEGEND:

- GROUND FAULT INTERRUPTING (GFI) TYPE DUPLEX CONVENIENCE OUTLET. MOUNTED 18" ABOVE FINISHED FLOOR
  WP - DENOTES TO BE PROVIDED WITH A WEATHERPROOF "IN-USE" COVER
- SPORTS LIGHTING
- TC — 7 DAY, ASTRONOMICAL DAY, OMITTING, 24 HOUR TIMECLOCK WITH SKIP A DAY FEATURE. SIMILAR TO PARAGON 4 POLE EC7000 SERIES
- HH — ELECTRICAL HAND-HOLE
- SH — SECRITY CAMERA HAND-HOLE
- AV — CAMERA SYSTEM AUDIO / VIDEO HAND-HOLE
- FUSED DISCONNECT SWITCH. SIZE AND RATING AS INDICATED ON DRAWINGS
- M — METER
- UTILITY POLE
- 20A 1P — CIRCUIT BREAKER
  TOP VALUE DENOTES BREAKER RATING
  BOTTOM VALUE DENOTES NUMBER OF POLES
- CURRENT TRANSFORMER
- TRANSFORMER
- GROUND CONDUCTOR
- HOMERUN TO PANEL AS INDICATED ON DRAWINGS
- CONDUIT STUB
- WIRE BREAK
- POWER WIRING / CONDUIT
- TELEPHONE / DATA CONDUIT
- CAMERA AUDIO, VIDEO AND FIBER WIRING / CONDUIT

ABBREVIATIONS & NOTATION

- 1 — REVISION TAG
  1 - DENOTES REVISION NUMBER

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
DW	DISHWASHER
EC	ELECTRICAL CONTRACTOR
EX	EXISTING TO REMAIN
ER	EXISTING RELOCATED
ED	EXISTING TO BE DEMOLISHED
ETR	EXISTING TO BE RELOCATED
EXR	EXISTING TO BE REPLACED
EXP	EXPLOSION PROOF
GC	GENERAL CONTRACTOR
IG	ISOLATED GROUND
MC	MECHANICAL CONTRACTOR
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
PC	PHOTOCELL
TR	TAMPER RESISTANT
WP	WEATHERPROOF

GENERAL NOTES

1. PERFORM ALL WORK IN ACCORDANCE WITH NATIONAL AND STATE ELECTRICAL CODES, LOCAL ORDINANCES, AND REQUIREMENTS OF THE WIRING INSPECTOR. CODES INCLUDE BUT ARE NOT LIMITED TO:
   a. NATIONAL BUILDING AND ELECTRICAL CODES
   b. STATE CODES
   c. LOCAL TOWN BY-LAWS AND AGENCY REQUIREMENTS.
   d. OTHER CODES AS LISTED ON ARCHITECTS CODE REVIEW TABLE WHERE APPLICABLE
2. MATERIALS
   a. ALL WIRING SHALL BE COPPER; CONDUCTORS WITH AMPACITIES OF 100 AMPS OR LESS OR CONDUCTORS MARKED AWG #14 THROUGH #1 SHALL BE 60°C. (UNLESS EQUIPMENT IS LISTED FOR HIGHER TEMPERATURES.) CONDUCTORS OF HIGHER AMPACITIES OR LARGER GAUGES SHALL BE 75°C. REFER TO 2023 NEC TABLE 310.16.
   b. ALL CIRCUIT BREAKERS SHALL BE 1" PER POLE, "MINI-BREAKERS" OR ANY BREAKER HAVING MORE THAN ONE HANDLE PER PANELBOARD / LOADCENTER POLE SPACE SHALL NOT BE PERMITTED.
   c. GENERAL BRANCH WIRING SHALL BE TYPE "MC" CABLE FOR INTERIOR WIRING. EXPOSED BRANCH CIRCUIT WIRING SHALL BE IN "EMT".
   d. ALL PRODUCTS AND DEVICES SHALL BE NEW AND BEAR THE UNDERWRITERS' LABORATORIES LABEL. DEVICES SHALL BE SPECIFICATION GRADE. COLOR OF DEVICES SHALL BE COORDINATED WITH THE ARCHITECT.
   e. ALL GROUND FAULT RECEPTACLES SHALL BE SELF TESTING TYPE
3. PERFORM ALL WORK IN A WORKMANLIKE AND TIMELY MANNER SUBJECT TO THE APPROVAL OF THE ENGINEER.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSURANCE, PERMITS, FEES AND BACKCHARGES REQUIRED FOR THE PERFORMANCE OF HIS/HER WORK.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH ALL OTHER TRADES. ANY CONFLICT SHALL BE PRESENTED TO THE GENERAL CONTRACTOR AND ENGINEER PRIOR TO INSTALLATION OF WORK.
6. PANEL DIRECTORIES SHALL REFLECT THE WORK PERFORMED UNDER THIS CONTRACT. PANELS SHALL BE PROVIDED WITH TYPED DIRECTORIES.
7. ALL PRODUCTS SHALL BE GUARANTEED FOR ONE YEAR AFTER ACCEPTANCE BY OWNER.
8. ALL WIRING AND EQUIPMENT ARE DEPICTED DIAGRAMMATICALLY. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD AND ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
9. SHOP DRAWINGS SHALL BE SUBMITTED ON ALL ELECTRICAL EQUIPMENT, BEFORE PROCUREMENT OF EQUIPMENT.
10. ALL NEW WIRING INDICATED ON PLANS SHALL MATCH THE AMPACITY OF THE CIRCUIT BREAKER INDICATED AT THE HOMERUN. WHERE NO BREAKER SIZE IS INDICATED, THE BREAKER SHALL BE 20A/1P WITH #12 AWG CABLE.
11. WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL RUN CONTINUOUS THROUGH-OUT CIRCUIT.
12. CONDUITS AND CIRCUITRY INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. FINAL LOCATION OF CONDUITS SHALL BE FIELD COORDINATED SO AS TO AVOID CONFLICTS WITH OTHER TRADES.
13. ALL 120 VOLT BRANCH CIRCUITS WHEN 100 LINEAR FEET OR MORE FROM LAST OUTLET OR FIXTURE IN CIRCUIT TO RESPECTIVE PANELBOARDS SHALL BE A MINIMUM OF #10 AWG COPPER WIRES).
14. ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE STOPPING ALL AROUND EACH CONDUIT THAT PENETRATES A RATED WALL, FLOOR AND/OR CEILING. FIRE STOP PUTTY SHALL BE UTILIZED AND COMPLETELY FILL ANY GAPS IN THE WALLS, CEILINGS AND/OR FLOORS IN ORDER TO MAINTAIN THE INTEGRITY OF THE FIRE RATED ASSEMBLY. THE FIRE CAULKING SHALL BE MANUFACTURED BY HILTI.
15. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT DOCUMENTATION.

ELECTRICAL SPECIFICATIONS

ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ELECTRICAL CONSTRUCTION MATERIALS SHOWN OR REASONABLY IMPLIED ON THE DRAWINGS TO COMPLETE THE INSTALLATION IN A SATISFACTORY AND USABLE MANNER.

ALL WORK SHALL BE IN A MANNER TO COMPLY WITH THE REQUIREMENTS OF BROWN UNIVERSITY, THE WISHES OF THE LOCAL FIRE DEPARTMENT AND ANY LOCAL OR STATE BODIES HAVING JURISDICTION.

ELECTRICAL CONTRACTOR SHALL OBTAIN A PERMIT AND PAY ALL PERMIT AND INSPECTION FEES FOR HIS WORK.

ALL MATERIALS SHALL BE NEW AND UL LISTED. THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING REQUIRED AND SHALL REMOVE DEBRIS FROM THE SITE.

EQUIPMENT MANUFACTURERS SHALL BE NOTED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ANY SUBSTITUTIONS SHALL BE APPROVED BY THE ARCHITECT/ENGINEERS.

ALL FEEDER RUNS TO HAVE NO MORE THAN 4-90 DEGREES BENDS. PROVIDE HAND HOLES FOR FEEDER RUNS WITH MORE THAN 4-90 DEGREES BENDS OR OVER 150'. ALL HAND HOLES TO BE IN ACCESSIBLE LOCATIONS.

CONDUIT BENDS TO HAVE MINIMUM RADIUS OF 10 TIMES THE DIAMETER OF THE CONDUIT.

ALL DISTRIBUTION CONDUIT OR CONDUIT INSTALLED 18" BELOW GRADE CONDUIT EXPOSED TO OUTDOOR WEATHER SHALL BE HEAVY WALL GALVANIZED STEEL. CONDUIT COUPLINGS SHALL BE COMPRESSION TYPE.

ALL DISCONNECT SWITCHES, POWER PANELS, AND CIRCUIT BREAKERS SHALL BE CLEARLY IDENTIFIED.

ALL ELECTRICAL EQUIPMENT AND WORK EXPOSED TO OUTSIDE WEATHER SHALL BE WEATHERPROOF (NEMA 3R).

CONTRACTOR SHALL PURCHASE AND MAINTAIN SUCH INSURANCE THAT WILL PROTECT THE OWNER AND ENGINEER FROM AND AGAINST ANY CLAIMS, LOSS, COST OR DAMAGE FOR INJURY OR DEATH TO PERSONS OR DAMAGE TO PROPERTY INCLUDING COST OF LITIGATION AND ATTORNEY'S FEES) IN ANY MANNER ARISING FROM, INCIDENT TO, CONNECTED WITH, OR GROWING OUT OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT, FURNISH CERTIFICATIONS OF INSURANCE IN THE AMOUNT REQUIRED BY THE OWNER AND LISTING THE OWNER AND THE ENGINEER TO BE HELD HARMLESS.

ALL POWER AND LIGHTING WIRE SHALL BE MINIMUM NO. 12 AWG COPPER OR AS OTHERWISE INDICATED ON THE DRAWINGS, (TYPE "THHN")

THIS CONTRACTOR SHALL SPECIFICALLY NOTE THAT THE ELECTRICAL DRAWINGS ARE INTENDED TO INDICATE ONLY THE EXTENT DIAGRAMMATICALLY, THE GENERAL LOCATION AND CHARACTER OF THE WORK INCLUDED. WORK INTENDED BUT HAVING MINOR DETAILS OBVIOUSLY OMITTED OR NOT SHOWN IN THE DRAWINGS ARE FOR IDENTIFICATION ONLY. THE BALANCING OF THE LOADS ON THE PANELS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL ELECTRICAL EQUIPMENT AND CONTROLS NOTED "BY THE OWNER" THROUGHOUT THE ELECTRICAL PLANS WILL BE FURNISHED BY ANOTHER DIVISION OF THE CONTRACT BUT SHALL BE RECEIVED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

ALL SIZES REGARDING PROTECTION, FEEDERS, AND CONTROLS ARE BASED ON THE PRELIMINARY DESIGN DATA. ELECTRICAL CONTRACTOR TO REVIEW EXISTING AND NEW NAMEPLATE DATA, MOTOR RATINGS AND LOADS REQUIREMENTS AND PROVIDE ANY NEEDED ADJUSTMENTS.

THE CONTRACTOR SHALL VISUALLY SURVEY THE PREMISES BEFORE SUBMITTING HIS PROPOSAL AND IF THERE ARE ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE ACTUAL CONDITIONS HE SHALL CONSULT THE OWNER/ENGINEER FOR CLARIFICATION ON SUBMISSION OF HIS PROPOSAL IT SHALL BE AGREED BY ALL PERSONS INVOLVED THAT THE WORK CAN BE AND WILL BE INSTALLED AS SHOWN OR AS MODIFIED IN WRITING BY THE OWNER/ENGINEER. ALSO, HE SHOULD FAMILIARIZE HIMSELF WITH THE SCHEDULE OF CONSTRUCTION. SHOP DRAWINGS FOR ALL SPECIFIED EQUIPMENT, MATERIAL, ETC. SHALL BE SUBMITTED FOR APPROVAL PRIOR TO THE PROCUREMENT.

PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN ALL DISTRIBUTION POWER EQUIPMENT AND PANELS.

ALL CONDUIT SHALL BE SIZED ACCORDING TO CODE UNLESS OTHERWISE NOTED ON THE DRAWINGS. MINIMUM SIZE TO BE USED IS 3/4".

ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODES, AS WELL AS THE LATEST MASSACHUSETTS ELECTRICAL CODE, LOCAL FIRE DEPARTMENT AND OSHA REQUIREMENTS.

ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND MANUFACTURERS EQUIPMENT DATA AND ALL OTHER DRAWINGS RELATED TO THE PERFORMANCE OF THE WORK.

ALL ELECTRICAL EQUIPMENT (PANELS, CONDUIT, WIRE, ETC.) AND RACEWAY SHALL BE PROPERLY SUPPORTED WITHIN TRENCHES.

THE CONTRACTOR SHALL GUARANTEE ALL OF HIS WORK FOR ONE YEAR AFTER THE DATE OF WRITTEN ACCEPTANCE BY THE OWNER AGAINST ALL DEFECTS IN MATERIAL AND WORKMANSHIP. ALL SUCH DEFECTS APPEARING WITHIN THE GUARANTEE PERIOD SHALL BE PROMPTLY REMEDIED WITHOUT COST OF OWNER. ALL ELECTRICAL EQUIPMENT INSTALLATIONS SHALL BE GUARANTEED TO OPERATE SATISFACTORY. THE CONTRACTOR MUST VERIFY EXISTING CONDITIONS AND LOCATIONS IN THE FIELD, PRIOR TO SUBMITTING A PROPOSAL. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK REQUIRED UNDER THIS CONTRACT.

THE CONTRACTOR SHALL ADJUST HIS WORK AS REQUIRED TO AVOID CONDITIONS NOT SHOWN ON PLANS WITHOUT ANY FURTHER COST TO THE OWNER.

THE CONTRACTOR AFTER INSPECTING THE PREMISES AND THE DRAWINGS SHALL CALL TO THE ATTENTION OF THE ENGINEER ANY LACK OF THE SPACE OR CLEARANCE REQUIRED BY THE VARIOUS EQUIPMENT BEFORE THE CONTRACT IS SIGNED.

THE CONTRACTOR SHALL REMOVE RUBBISH AND DEBRIS RESULTING FROM HIS WORK ON A DAILY BASIS. THE JOB SITE MUST BE LEFT CLEAN AND TIDY AT THE END OF EACH WORKDAY. RUBBISH NOT REMOVED BY THE CONTRACTOR WILL BE REMOVED BY THE GENERAL CONTRACTOR AND THERE WILL BE BACK CHARGES TO THE CONTRACTOR.

ALL CONDUIT, RACEWAY, AND ELECTRICAL APPARATUS SHALL BE INSTALLED AS NEATLY AS POSSIBLE AND IN SUCH A MANNER AS TO AFFORD MINIMUM INTERFERENCE WITH OTHER TRADES.

ALL CONDUIT SHOULD BE SUPPORTED A MINIMUM OF 6 FEET ON CENTER AND WITHIN 3 FEET OF COUPLINGS IN COMPLIANCE WITH CODE REQUIREMENTS.

ALL JUNCTION BOXES AND SUPPORT BOXES ARE TO BE SUPPORTED

NO FLEXIBLE ELECTRICAL METALLIC CONDUIT (GREENFIELD) SMALLER THAN 1/2 INCH SHALL BE USED UNLESS SPECIAL PERMISSION IS GRANTED.

THE AMPACITY OF THE MULTIPLE CONDUCTORS IN ONE CONDUIT SHALL BE RATED PER NEC TABLE 310.15(B)(3)(a).

ALL CONDUIT BREAKERS SHALL BE THE BOLT-ON TYPE.

ALL RECEPTACLES ARE TO BE RATED FOR 20 AMPS. (MINIMUM)

ANY EQUIPMENT AND RECEPTACLES INSTALLED MUST BE IDENTIFIED ON THE DIRECTORY CARD WITH THE DATE IN THE ELECTRICAL AND POWER PANELS.

WHEN INSTALLING ELECTRICAL PANELS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ALL THE CIRCUITS ON THE DIRECTORY CARD WITH THE DATE.

COLOR CODE FOR CONDUCTORS FOR SECONDARY FEEDERS AND BRANCH CIRCUITS ARE TO BE AS INDICATED BELOW:

PHASE	120/208 VOLT
A----	BLACK
B----	RED
C----	BLUE
NEUTRAL	WHITE
GROUND-	GREEN

PHASE	277/480 VOLT
A----	BROWN
B----	ORANGE
C----	YELLOW
NEUTRAL	GRAY
GROUND-	GREEN

ELECTRICAL METALLIC CONDUIT ALONG WITH COMPRESSION CONNECTORS AND COUPLING MAY BE USED IN DRY AREAS ONLY.

TO ASSURE EFFECTIVE GROUNDING, ALL CONDUIT, EQUIPMENTS, AND METAL ENCLOSURE SHALL HAVE A CONTINUOUS PATH TO GROUND WITH SUFFICIENTLY LOW IMPEDANCE TO LIMIT THE POTENTIAL ABOVE GROUND, AND TO FACILITATE THE OPERATION OF THE OVER CURRENT DEVICES IN THE CIRCUITS.

STANDARD WIRING SHALL BE OF THHN INSULATION AND THWN INSULATION FOR AREAS WITH HIGH MOISTURE. NO TW INSULATION IS PERMITTED.

THE PROJECT WILL NOT BE CONSIDERED COMPLETE UNTIL AS-BUILT DRAWINGS WITH HOME RUNS IDENTIFIED ARE RECEIVED BY THE OWNER.

ALL CONTRACTORS MUST FOLLOW STANDARD OSHA LOCK-OUT AND TAG-OUT PROCEDURES.

WHERE A CONFLICT ARISES BETWEEN THE SPECIFICATIONS AND THE DRAWINGS THE WORST CASE SCENARIO SHALL PREVAIL.

ALL DISTRIBUTION EQUIPMENT AND PANELBOARDS SHALL BE MANUFACTURED BY EATON / CUTLER HAMMER.

NEW SHEET

VINCENT A. DIORIO, INC.
est. 1972
CONSULTING ENGINEERS
89 Access Rd. Suite 18
Norwood, MA 02062
(781)255-9754 | vadjr@vadeng.com
www.vadeng.com

REVISIONS:

REV.:	DATE:	DESCRIPTION:

CLIENT:
NESRA ENGINEERING
111 WASHINGTON ST
PLAINVILLE, MA 02762

PROJECT:
MARSHALL SIMMONDS ATHLETIC FIELDS
114 WINN STREET
BURLINGTON, MA 01803

DRAWING TITLE
ELECTRICAL LEGENDS AND NOTES

DRAWN:	ANC
CHECKED:	VAD Jr
SCALE:	
DATE:	JANUARY 7, 2026

ES0.1

LOCATION: AS INDICATED
MOUNTING: SURFACE

PANEL: "HP"
RATING: 200A

VOLTAGE: 277/480V., 3Ø-4W 14k AIC
TYPE OF MAIN: M.L.O. 42 POLE

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	VOLTAMPS ØC	FRAME	TRIP	POLES	CKTS		POLES	TRIP	FRAME	VOLTAMPS ØA	VOLTAMPS ØB	VOLTAMPS ØC	DESCRIPTION
POLE "S4"	3300			-	20	3	1	2	3	20	-	3300			POLE "S3"
----		3300		-	-	-	3	4	-	-	-		3300		----
----			3300	-	-	-	5	6	-	-	-			3300	----
POLE "S5"	3300			-	20	3	7	8	3	20	-	3300			POLE "S6"
----		3300		-	-	-	9	10	-	-	-		3300		----
----			3300	-	-	-	11	12	-	-	-			3300	----
POLE "S1"	3300			-	20	3	13	14	3	20	-	3300			POLE "S2"
----		3300		-	-	-	15	16	-	-	-		3300		----
----			3300	-	-	-	17	18	-	-	-			3300	----
SPARE	•			-	20	1	19	20	1	20	-	•			SPARE
SPARE		•		-	20	1	21	22	1	20	-		•		SPARE
SPARE			•	-	20	1	23	24	1	20	-			•	SPARE
SPARE	•			-	20	1	25	26	1	20	-	•			SPARE
SPARE		•		-	20	1	27	28	1	20	-		•		SPARE
SPARE			•	-	20	1	29	30	1	20	-			•	SPARE
SPARE	•			-	20	1	31	32	1	20	-	•			SPARE
SPARE		•		-	20	1	33	34	1	20	-		•		SPARE
SPARE			•	-	20	1	35	36	1	20	-			•	SPARE
SPARE	•			-	20	1	37	38	1	20	-	•			SPARE
SPARE		•		-	20	1	39	40	1	20	-		•		SPARE
SPARE			•	-	20	1	41	42	1	20	-			•	SPARE

LOCATION: AS INDICATED
MOUNTING: SURFACE

PANEL: "LP"
RATING: 100A

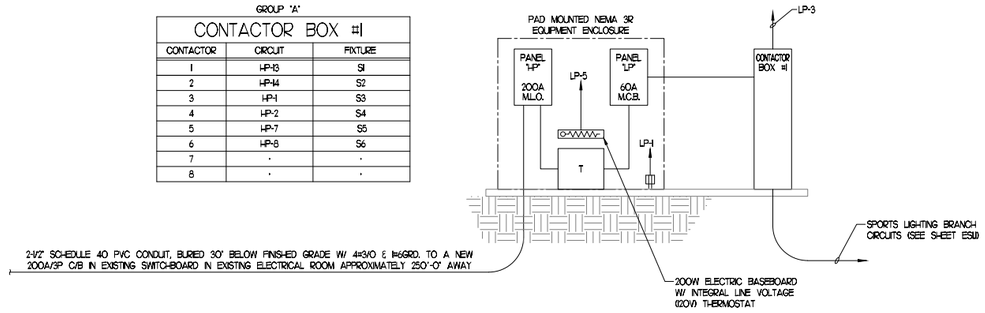
VOLTAGE: 120/208V., 3Ø-4W 10k AIC
TYPE OF MAIN: 60A M.C.B. 12 POLE

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	VOLTAMPS ØC	FRAME	TRIP	POLES	CKTS		POLES	TRIP	FRAME	VOLTAMPS ØA	VOLTAMPS ØB	VOLTAMPS ØC	DESCRIPTION
RECEPTACLE	1000			-	20	1	1	2	1	20	-	1000			SCOREBOARD
CONTACTOR BOX		1000		-	20	1	3	4	1	20	-		1000		COMBOX
ENCLOSURE HEATER			200	-	20	1	5	6	1	20	-			1000	COMBOX
COMBOX	1000			-	20	1	7	8	1	20	-	•			SPARE
COMBOX		1000		-	20	1	9	10	1	20	-		•		SPARE
SCOREBOARD			1000	-	20	1	11	12	1	20	-			•	SPARE

GROUP "A"

CONTACTOR BOX #1

CONTACTOR	CIRCUIT	FIXTURE
1	HP-13	S1
2	HP-14	S2
3	HP-1	S3
4	HP-2	S4
5	HP-7	S5
6	HP-8	S6
7	•	•
8	•	•



POWER ONE LINE DIAGRAM

SCALE: NOT TO SCALE

HANDHOLE NOTES:

A. THE LOCATION OF OUTLETS SHOWN ON DRAWINGS IS APPROXIMATE. THE ELECTRICAL CONTRACTOR SHALL STUDY THE PLANS IN RELATION TO THE AREAS AND EQUIPMENT SURROUNDING EACH HAND HOLE SO THAT HAND HOLES OR OTHER ELECTRICAL COMPONENTS ARE SYMMETRICALLY LOCATED AND ARE IN LINE WITH ONE ANOTHER FOR EASE OF PULLING CONDUCTORS.

B. HAND HOLES OR PULL BOXES, SHOWN ON THE DRAWINGS, THAT INTERFERE WITH THE INSTALLATION OF SUB-SURFACE UTILITIES, STRUCTURAL POLE BASES OR ARCHITECTURAL FEATURES, OR THAT WILL BE INACCESSIBLE DUE TO THE WORK OF OTHER TRADES SHALL BE RELOCATED ACCORDINGLY.

C. HAND HOLES, JUNCTION OR PULL BOXES THAT ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS BUT ARE REQUIRED FOR THE PROPER INSTALLATION OF THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR, SO THAT THEY DO NOT INTERFERE WITH THE STRUCTURAL OR ARCHITECTURAL FEATURES AND THE INSTALLATION OF MATERIALS BY THE OTHER TRADES.

D. ANY REASONABLE CHANGE IN THE LOCATION OF HAND HOLES OR JUNCTION BOXES REQUESTED BY THE ENGINEER, PRIOR TO ROUGHING, SHALL NOT INVOLVE ADDITIONAL EXPENSE TO THE OWNER.

E. ALL HAND HOLES SHALL BE INSTALLED SO THAT THE COVER OF EACH HAND HOLE IS AT FINISHED GRADE.

F. FEEDERS AND BRANCH CIRCUITS PASSING THROUGH HAND HOLES SHALL BE INDIVIDUALLY GROUPED AND BOUND WITH TIE-RAPS. THE FEEDERS AND BRANCH CIRCUITS IN EACH HAND HOLE SHALL BE PROPERLY TAGGED TO CLEARLY INDICATE THEIR ELECTRICAL CHARACTERISTICS, CIRCUIT NUMBER AND PANEL DESIGNATION. CABLES SHALL BE SUPPORTED ON SUITABLE RACKS WITHIN THE BOXES AND ARRANGED IN AN ORDERLY MANNER.

G. HAND HOLES SHALL, IN GENERAL, BE AS FOLLOWS:

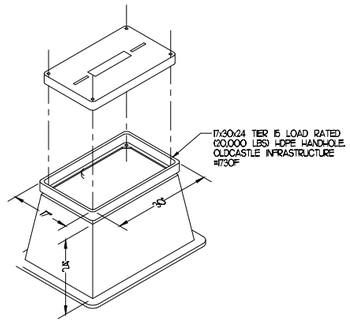
1. HAND HOLES SHALL BE A MINIMUM OF 17" X 30" X 18" DEEP WITH STRAIGHT SIDES AND A GASKETED COVER.
2. HAND HOLES SHALL BE FLUSH WITH GRADE AND COMPLY WITH THE 2023 NATIONAL ELECTRIC CODE.
3. EACH HAND HOLE SHALL BE MADE OF POLYMER CONCRETE AND BE STABLE UNDER FREEZE AND THAW CONDITIONS.
4. EACH HAND HOLE SHALL BE IMPACT RESISTANT AS TESTED PER ATM D-244 AND BE LOW WATER ABSORPTION, CORROSION RESISTANT, NON-FLAMMABLE AND NONCONDUCTIVE.
5. EACH HAND HOLE SHALL BE PROVIDED WITH A BOLTED, GASKETED TIER 15 COVER. THE HARDWARE SHALL BE STAINLESS STEEL.
6. EACH HAND HOLE COVER SHALL BE EMBOSSED WITH THE WORD "ELECTRICAL".
7. EACH HAND HOLE SHALL BE MANUFACTURED BY OLDCASTLE INFRASTRUCTURE #1730F OR EQUAL.

H. HAND HOLES SHALL BE PROPERLY SEALED DURING THE COURSE OF CONSTRUCTION TO PREVENT THE ENTRANCE OF DIRT AND FOREIGN MATERIALS.

I. EXPOSED, SURFACE MOUNTED OUTLET BOXES OR OUTLET BOXES INSTALLED IN NORMALLY WET LOCATIONS SHALL BE OF THE CAST METAL TYPE WITH THREADED HUBS AS MANUFACTURED BY PASS & SEYMOUR/LEGRAND, CROUSE-HINDS OR RED DOT.

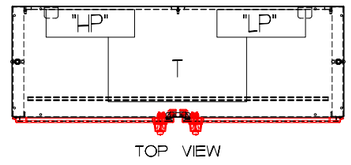
J. OUTLET BOXES SHALL NOT BE LESS THAN 1-1/2 INCHES DEEP UNLESS SHALLOWER BOXES ARE REQUIRED BY STRUCTURAL CONDITIONS AND ARE SPECIFICALLY APPROVED BY THE ENGINEER.

K. OUTLET BOXES ON THE EXTERIOR OF ANY STRUCTURE SHALL BE PROVIDED WITH UL LISTED WEATHERPROOF COVERS THAT ALLOW A PLUG TO BE IN PLACE WITH THE COVER IN CLOSED POSITION. COVERS SHALL BE SINGLE GANG, HORIZONTAL DUPLEX, GFI-USED APPLICATION IN ACCORDANCE WITH ARTICLE 406 OF THE NATIONAL ELECTRIC CODE AND AS MANUFACTURED BY PASS & SEYMOUR/LEGRAND.

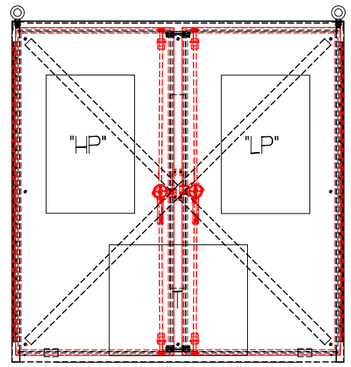


HANDHOLE

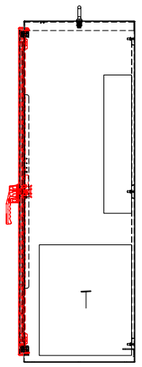
SCALE: NOT TO SCALE



TOP VIEW



FRONT VIEW



SIDE VIEW

74"x24" WEATHERPROOF ENCLOSURE

SCALE: NOT TO SCALE

EXTERIOR ENCLOSURE NOTES:

A. THE EXTERIOR ENCLOSURE SHALL BE PAD MOUNTED ON A CONCRETE PAD AND MANUFACTURED BY HOFFMAN. THE ENCLOSURE SHALL BE A TWO DOOR CONFIGURATION WITH A THREE-POINT LATCHING SYSTEM WITH PADLOCKING HANDLES AND A FOAM-IN-PLACE GASKET FOR SECURITY PURPOSES. THE ENCLOSURE SHALL BE NEMA 4, IP66 SUITED FOR USE IN OUTDOOR APPLICATIONS.

B. THE ENCLOSURE SHALL BE MANUFACTURED FROM 12 GAUGE TYPE 304 OR 316L STAINLESS STEEL. BACK PANELS SHALL BE 10 GAUGE STAINLESS STEEL WITH X-FORM STIFFENERS. SEAMS SHALL BE CONTINUOUSLY WELDED AND GROUND SMOOTH, NO HOLES OR KNOCKOUTS WILL BE PERMITTED.

C. A REMOVABLE CENTER-POST FOR EASY PANEL INSTALLATION SHALL BE PROVIDED ALONG WITH COLLAR STUDS FOR MOUNTING OPTIONAL PANELS. MOUNTING PANEL AND PANEL SUPPORTS SHALL BE INCLUDED.

D. HEAVY-DUTY LIFTING EYES SHALL BE TYPE 316L STAINLESS STEEL.

E. HEAVY-DUTY 3-POINT LATCHING MECHANISM OPERATED BY TYPE 316L STAINLESS STEEL POWERGLIDE PADLOCKING HANDLES SHALL BE INCLUDED.

F. BODY FLANGE TROUGH COLLAR SHALL EXCLUDE LIQUIDS AND CONTAMINANTS

G. HEAVY-DUTY STAINLESS STEEL CONTINUOUS HINGES SHALL SUPPORT EACH DOOR

H. BONDING PROVISION ON DOORS ALONG WITH GROUNDING STUDS ON BODY SHALL BE PROVIDED.

I. ACCESSORY MOUNTING CHANNEL SHALL BE PROVIDED IN ENCLOSURE TOP.

J. DATA POCKET SHALL BE HIGH-IMPACT THERMOPLASTIC AND MOUNTED TO THE INSIDE OF THE DOORS.

K. 12" REMOVABLE FLOOR STANDS SHALL BE BOLTED TO ENCLOSURE.

L. SEAMLESS FOAM-IN-PLACE ONE-PIECE GASKET SHALL PROVIDE OIL-TIGHT AND DUST-TIGHT SEAL AGAINST CONTAMINANTS.

M. EXTERNAL HARDWARE MANUFACTURED OF TYPE 316 STAINLESS STEEL AND THE ENCLOSURE SHALL BE UNPAINTED AND FRONT, SIDES, TOP AND BACK SHALL A HAVE SMOOTH #4 BRUSHED FINISH.

NEW SHEET

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est. 1972
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(781)255-9754 | vadjr@vadeng.com
www.vadeng.com

REVISIONS:

REV.:	DATE:	DESCRIPTION:

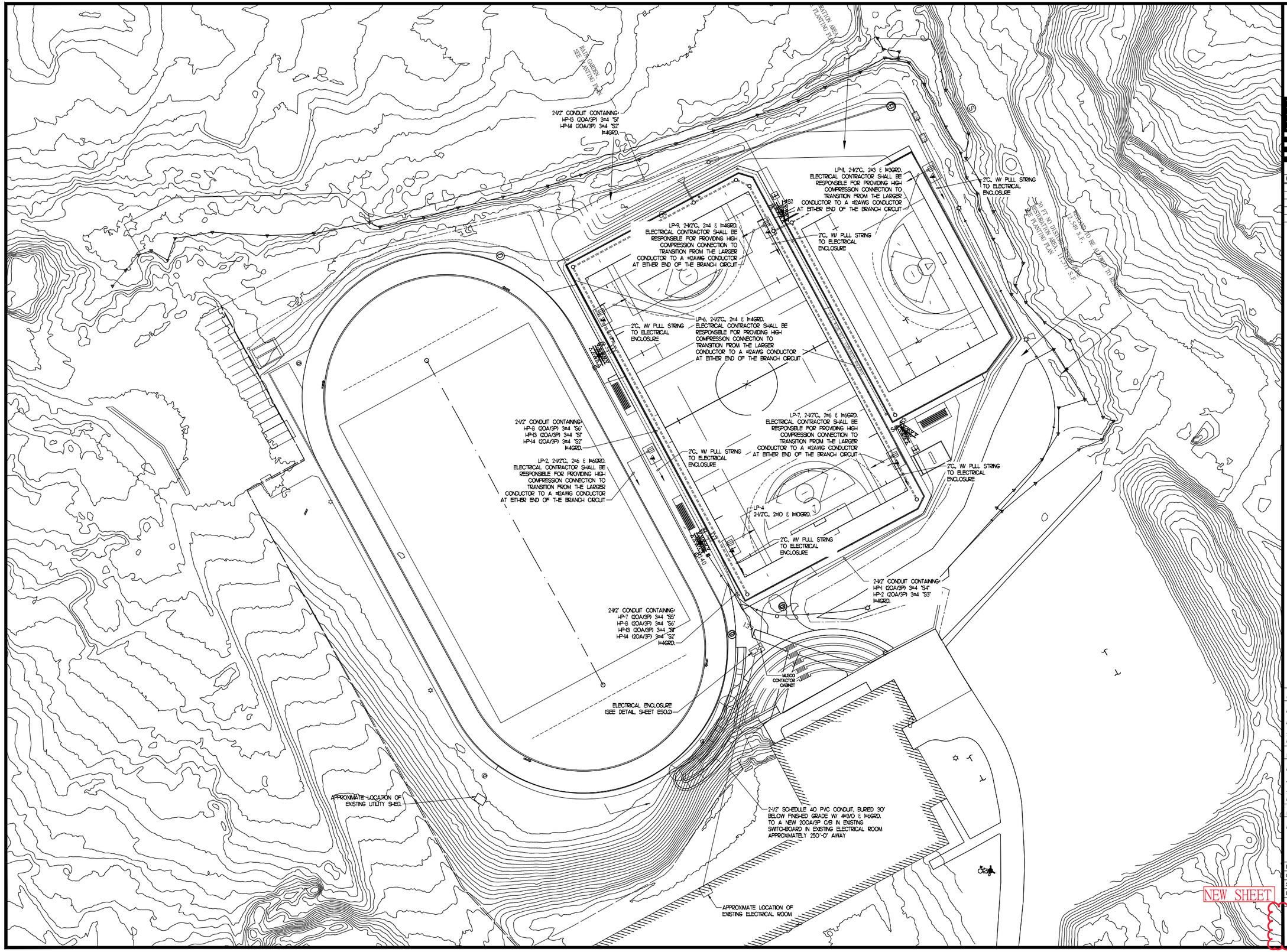
CLIENT:
NESRA ENGINEERING
111 WASHINGTON ST.
PLAINVILLE, MA 02762

PROJECT:
MARSHALL SIMMONDS ATHLETIC FIELDS
114 WINN STREET
BURLINGTON, MA 01803

DRAWING TITLE
ELECTRICAL DETAILS

DRAWN: ANC
CHECKED: VAD Jr
SCALE:
DATE: JANUARY 7, 2026

ES0.2



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MARSHALL SIMMONDS ATHLETIC FIELDS
114 WINN STREET
BURLINGTON, MA 01803

DRAWING TITLE
ELECTRICAL SITE PLAN

DRAWN:	ANC
CHECKED:	VAD Jr
SCALE:	1" = 40'-0"
DATE:	JANUARY 7, 2026

ES1.1