

GENERAL NOTES

- 1. SITE SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON THE GROUND SURVEY PERFORMED BY PRECISION LAND SURVEYING, INC. , 5/29/2024
2. PROPERTY LINES ARE APPROXIMATELY LOCATIONS AS PROVIDED FROM THE CITY OF LOWELL GIS DEPARTMENT ON 8/27/2024.
3. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
4. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES, IN ACCORDANCE WITH M.G.L. CHAPTER 82, SECTION 40, INCLUDING AMENDMENTS. CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT (888) 344-7233 NO LESS THAN 72 HOURS, (EXCLUSIVE OF WEEKENDS AND HOLIDAYS), PRIOR TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
5. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE OWNERS REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
6. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE CITY OF LOWELL.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
8. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING. ITEMS ENCOUNTERED IN AREAS OF EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
9. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
10. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
11. ALL WORK SHOWN ON THE PLANS AS BOLD SHALL REPRESENT PROPOSED WORK. THE TERM "PROPOSED [PROPI]" INDICATES WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND SALVAGE (R&S)", OR REMOVE, RELOCATE, SALVAGE, (R,R&S).
12. ALL KNOWN EXISTING STATE, COUNTY AND CITY LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
14. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
15. FILLING OF EXCAVATED AREAS SHALL NOT TAKE PLACE WITHOUT THE PRESENCE OR PERMISSION OF THE OWNER.
16. EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPIILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE DRIP LINE OF TREES TO REMAIN. NO GUYS SHALL BE ATTACHED TO ANY TREE TO REMAIN. WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ERECT TEMPORARY BARRIERS FOR THE PROTECTION OF EXISTING TREES DURING CONSTRUCTION.
17. TREES AND SHRUBS WITHIN THE LIMITS OF WORK SHALL BE REMOVED ONLY UPON THE APPROVAL OF THE OWNERS REPRESENTATIVE OR AS NOTED ON THE PLANS.
18. NO FILLING SHALL OCCUR AROUND EXISTING TREES TO REMAIN WITHOUT THE APPROVAL OF THE OWNER OR OWNERS REPRESENTATIVE.
19. THE CONTRACTOR SHALL REMOVE ALL SURFACE VEGETATION PRIOR TO GRADING THE SITE. TREES AND STUMPS SHALL BE REMOVED AND DISPOSED COMPLETE BY CONTRACTOR. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS (INCLUDING SILT FENCE, STRAW WATTLES, OR SILT SOCKS) SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE PROJECT WHICH COST SHALL BE INCIDENTAL TO THE PROJECT.
20. ALL UNSUITABLE UNCONTAMINATED EXCESS SOIL FROM CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. REMOVAL ACTIVITIES SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST TO THE CITY. SUITABLE SOIL EXCAVATION AS PART OF THE PROJECT MUST MEET ONE OR MORE OF THE MATERIAL REQUIREMENTS SPECIFIED. ON-SITE FILL MATERIALS, WHICH DO NOT CONFORM TO THE SPECIFICATIONS, SHALL NOT BE USED BELOW ANY STRUCTURES. IF THE CONTRACTOR PROPOSES TO USE THE EXISTING FILL ON SITE BELOW PAVEMENT AREAS, HE MUST DEMONSTRATE THAT THE FILL MEETS THE REQUIREMENTS PER THE SPECIFICATIONS. ALL EXCAVATED FILL MATERIAL, WHICH DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT NO ADDITIONAL COST.
21. CONTRACTOR IS RESPONSIBLE FOR STAKING CONSTRUCTION BASELINES IN FIELD WITH A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR. NO CONSTRUCTION WILL BE PERFORMED WITHOUT THE PROPOSED BASELINES AND LAYOUTS APPROVED BY THE OWNERS REPRESENTATIVE.
22. NO FILL SHALL CONTAIN HAZARDOUS MATERIALS.
23. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AROUND PERIMETER OF WORK AREA (LIMIT OF WORK). FENCE SHALL NOT IMPEDE TRAVEL WAYS.
24. ANY QUANTITIES SHOWN ON PLANS ARE FOR COMPARATIVE BIDDING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT SITE TO VERIFY ALL QUANTITIES AND CONDITIONS PRIOR TO SUBMITTING BID.
25. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. REMOVE ALL SOIL, SEDIMENT, DEBRIS AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.
26. CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE AND IN AREAS APPROVED BY OWNER. ANY OTHER AREAS THAT THE CONTRACTOR MAY WISH TO USE FOR STAGING MUST BE COORDINATED WITH THE OWNER.
27. THE CONTRACTOR SHALL KEEP ALL STREETS, PARKING LOTS AND WALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
28. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
29. CONTRACTOR SHALL DEWATER AS NECESSARY TO PERFORM THE PROPOSED WORK. CONTRACTOR SHALL BE AWARE OF PERCHED GROUNDWATER.
30. THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION AND AGREED UPON WITH THE OWNERS REPRESENTATIVE.
31. DEEP SUMP CATCH BASINS AND STORMWATER BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND SHALL FOLLOW THE OPERATION AND MAINTENANCE PLAN THEREAFTER.
32. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7 AM TO 5 PM.
33. ANY BOULDERS 3 CY OR SMALLER SHALL BE CONSIDERED UNDOCUMENTED FILL AND SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE CITY.
34. WORK ON SATURDAYS SHALL ONLY BE CONDUCTED IF PRIOR WRITTEN PERMISSION IS PROVIDED BY THE CITY.
35. NO TRUCKS LEFT IDLING ON CITY STREETS DURING CONSTRUCTION. CONSTRUCTION TRAFFIC AT NO TIME SHALL IMPEDE FLOW OF RESIDENT TRAFFIC.

EROSION & SEDIMENT CONTROL NOTES

- 1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PUT INTO PLACE PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION. REFER TO PLANS FOR APPROXIMATE LOCATION OF EROSION AND SEDIMENT CONTROL. REFER TO SPECS AND DETAILS FOR TYPE OF EROSION AND SEDIMENT CONTROL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF ALL CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL MEET ALL OF THE STATE OF MASSACHUSETTS D.E.P. AND THE CITY OF LOWELL WETLAND ORDINANCE REGULATIONS FOR SEDIMENT AND EROSION CONTROL.
4. EXCAVATED MATERIAL STOCKPILED ON THE SITE SHALL BE SURROUNDED BY A RING OF UNBROKEN SEDIMENT AND EROSION CONTROL FENCE. THE LIMITS OF ALL GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMIT OF CONTRACT SHALL REMAIN TOTALLY UNDISTURBED UNLESS OTHERWISE APPROVED BY OWNERS REPRESENTATIVE.
5. ALL CATCH BASINS AND DRAIN GRATES WITHIN LIMIT OF CONTRACT SHALL BE PROTECTED WITH SILT SACKS DURING THE ENTIRE DURATION OF CONSTRUCTION.
6. EROSION CONTROL BARRIERS TO BE INSTALLED AT THE TOE OF SLOPES. SEE SHEET L200, NOTES, DETAILS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY OWNER.
8. ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC/PRIVATE ROADS.

DEMOLITION & SITE PREPARATION NOTES

- 1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE REMOVED / SALVAGED (R&S), ALL SITE FEATURES CALLED FOR REMOVAL (REM) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC. TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO ADDITIONAL COST TO THE OWNER.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE AT NO ADDITIONAL COST.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN. OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY. AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.
7. 'STRIP AND REMOVE TURF' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH. REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.
8. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNERS REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNERS REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. LOAM / TOP SOIL SHALL NOT BE REUSED AS GENERAL FILL.
11. THE CONTRACTOR SHALL NOT PROTECT EXISTING TREES TO REMAIN, CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AFTER CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.

LAYOUT & MATERIALS NOTES

- 1. REFER TO EXISTING CONDITIONS PLANS FOR SURVEY INFORMATION (SHEET L100).
2. COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES OPERATIONS ENCOMPASSED BY THIS CONTRACT. SET, PROTECT AND REPLACE REFERENCE STAKES AS NECESSARY OR AS REQUIRED BY THE OWNERS REPRESENTATIVE.
3. ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED "BY OTHERS" OR "UNDER SEPARATE CONTRACT".
4. TO FACILITATE LAYOUT OF PROPOSED SITE FEATURES AND FACILITIES, LAYOUT INFORMATION FOR CERTAIN FUTURE WORK, WHICH IS NOT INCLUDED WITHIN THE SCOPE OF THIS CONTRACT HAS BEEN PROVIDED ON THE LAYOUT AND MATERIALS PLAN FOR INFORMATION ONLY. SOME ITEMS ARE "NOT IN CONTRACT" (NIC) AND SHOWN FOR REFERENCE ONLY.
5. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
6. THE LAYOUT OF ALL NEW PATHWAYS / WALKWAYS AND THE GRADING OF ALL SLOPES AND CROSS SLOPES SHALL CONFORM TO THE MASSACHUSETTS RULES AND REGULATIONS FOR HANDICAP ACCESS CMR 821, AND THE AMERICANS WITH DISABILITIES ACT (ADA), TITLE 3. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE REQUIRED.
7. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
8. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS DIRECTED, AT NO ADDITIONAL COST TO THE OWNER. ALL LAYOUT SHALL BE PERFORMED BY A MA. REGISTERED PROFESSIONAL LAND SURVEYOR.
9. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES. ALL BITUMINOUS CONCRETE SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. ALL PATHWAY WIDTHS SHALL BE AS NOTED ON THE LAYOUT AND MATERIALS PLAN.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES.
12. THE DEPTH OF LOAM BORROW FOR ALL PROPOSED LAWN AREAS SHALL BE 6" MINIMUM. ALL DISTURBED AREAS SHALL BE RESTORED WITH LOAM AND SEED UNLESS OTHERWISE NOTED
13. SURVEY CONTROL POINTS AND COORDINATES ARE INDICATED ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OR CREATE HIS OWN PROTECTED CONTROL POINTS FROM THIS INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL LAYOUT POINTS ARE CONSISTENT WITH CONTROL INFORMATION. RESETTING OF DAMAGED OR MISSING LAYOUT MARKERS AS NECESSARY IS AT NO ADDITIONAL COST TO THE OWNER.

GRADING, DRAINAGE AND UTILITY NOTES

- 1. ALL WORK RELATING TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND/OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF LOWELL DPW.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
3. ALL GRADING IS TO BE SMOOTH AND CONTINUOUS WHERE PROPOSED SURFACES MEET EXISTING SURFACES. ELIMINATE ROUGH SPOTS AND ABRUPT GRADE CHANGES AND MEET LINE AND GRADE OF EXISTING CONDITIONS WITH NEW IMPROVEMENTS.
4. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE (1.5% MINIMUM) AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
5. CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
6. MINIMUM CROSS SLOPE ON ALL WALKWAYS WILL BE 1% TO PROVIDE POSITIVE DRAINAGE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.
7. ALL UTILITY GRATES, COVERS OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES. ALL UTILITY GRATES WITHIN PLAYING FIELDS OR INDICATED TO BE "BURIED" SHALL BE 4" BELOW FINISH GRADE AND COVERED WITH FINISH MATERIAL INDICATED ON PLANS.
8. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS, PUBLIC/PRIVATE STREETS AND WORK AREAS. CLEAN BASINS REGULARLY AS NEEDED AND AT THE END OF THE PROJECT.
9. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
10. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
11. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
12. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
13. SEE EARTHWORK SECTION OF SPECIFICATIONS FOR SPECIFIC EXCAVATION AND FILLING PROCEDURES.
14. FOR STRUCTURE REMODELING (REMOD), CONSTRUCTION METHODS SHALL FOLLOW MASSACHUSETTS DOT STANDARD SPEC, LATEST EDITION.
15. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS, STRUCTURE RIMS AND INVERTS, ALONG WITH PIPE SIZES AND CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL MAKE THE ENGINEER AWARE OF ANY DISCREPANCIES OR POOR UTILITY PIPES/CONDUITS, APPARATUS OR STRUCTURE CONDITION PRIOR TO CONSTRUCTION.

PLANTING NOTES

- 1. COORDINATE ALL PLANTING ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES PLANS ENCOMPASSED BY THIS CONTRACT. SET, PROTECT AND REPLACE REFERENCE STAKES AS NECESSARY OR AS DIRECTED BY THE OWNERS REPRESENTATIVE.
2. ALL PLANT MATERIAL WILL NEED TO BE TAGGED AND APPROVED BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
3. THE CONTRACTOR SHALL IDENTIFY PROPOSED TREE LOCATIONS PRIOR TO PLACEMENT WITH A STAKE AND COORDINATE WITH THE OWNERS REPRESENTATIVE TO MAKE ANY NECESSARY ADJUSTMENTS BEFORE ACTUAL PLACEMENT. THE CONTRACTOR SHALL NOT PLACE NEW TREES DIRECTLY UNDER OVERHEAD WIRES OR ABOVE UTILITY LINES.
4. ALL EXISTING TREES TO REMAIN AND BE PROTECTED ARE TO BE PRUNED FOR CROWN CLEANING AND DEADWOOD REMOVAL.
5. PLANT LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND SHALL BE APPROVED IN THE FIELD BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
6. GROUNDCOVER ARE TO BE EQUALLY SPACED WITHIN PLANTING BED AREA. REFER TO PLANT SCHEDULE FOR SPACING.

ABBREVIATIONS

GENERAL

Table with 2 columns: Abbreviation and Full Name. Includes terms like ABAN, ADJUST, BENCH MARK, BITUMINOUS CONCRETE, BLACK VINYL CHAIN LINK, CEMENT CONCRETE, CHAIN LINK FENCE, CONNECT TO EXISTING, ELECTRICAL CONTRACTOR, EDGE OF PAVEMENT, EQUIPMENT, EXISTING, FLOW LINE, FOUNDATION, FINISHED FLOOR, GENERAL CONTRACTOR, GRANITE CURB, HANDICAP, HANDICAP, LIMIT OF WORK, HOT MIX ASPHALT, MAIL BOX, NOT IN CONTRACT, NOT TO SCALE, PROPERTY LINE, PRESERVE AND PROTECT, PLUMBING CONTRACTOR, PROPOSED, PROTECT, PAVEMENT, REMOVE AND DISPOSE, REMOVE AND STACK, REMOVE, RELOCATED AND SALVAGE, RIGHT-OF-WAY, REMOVE, RETAIN, TEMPORARY, TYPICAL, VERIFY IN FIELD, WHEELCHAIR RAMP.

UTILITIES

Table with 2 columns: Abbreviation and Full Name. Includes terms like ASPHALT COATED CORRUGATED METAL PIPE, CHANGE IN TYPE, CATCH BASIN, CATCH BASIN W/ CURB INLET, CAST IRON, CURB INLET, CAST IRON PIPE, CORRUGATED METAL PIPE, CLEANOUT, CONNECTION UNKNOWN, DRAIN INLET, DRAIN MANHOLE, DOWN SPOUT, FRAME AND COVER, FRAME AND GRATE, GUTTER INLET, GUTTER INLET W/ CURB INLET, GARAGE WASTE, GATE VALVE, HIGH DENSITY POLYETHYLENE PIPE, HANDHOLE, HYDRANT, INVERT, LEACHING BASIN, LEACHING CHAMBER, LEACHING GALLEY, LIGHT POLE, OUTLET CONTROL STRUCTURE, OIL AND GRIT TRAP, OVERHEAD WIRE, POLYVINYL CHLORIDE, REINFORCED CONCRETE PIPE, SEWER MANHOLE, STORM WATER TREATMENT UNIT, UTILITY POLE, UTILITY POLE WITH LIGHT, VITRIFIED CLAY PIPE, WATER GATE.

GRADING

Table with 2 columns: Abbreviation and Full Name. Includes terms like BOTTOM OF WALL, BOTTOM OF CURB, CENTER OF CURB, ELEVATION, HIGH POINT, LOW POINT, TOP OF CURB, TOP OF WALL.

Project: CITY OF LOWELL. THE MAYORALTY OF THE CITY OF LOWELL. FATHER MAGUIRE. 80 WOODWARD AVENUE, LOWELL, MA.

Weston & Sampson logo. Weston & Sampson Engineers, Inc. 85 Devonshire Street, 3rd Floor Boston, MA 02109. 978.532.1900 800.SAMPSON. www.westonandsampson.com

Consultants: (Empty box for listing consultants)

Revisions table with columns: No., Date, Description.

COA: (Empty box for COA information)



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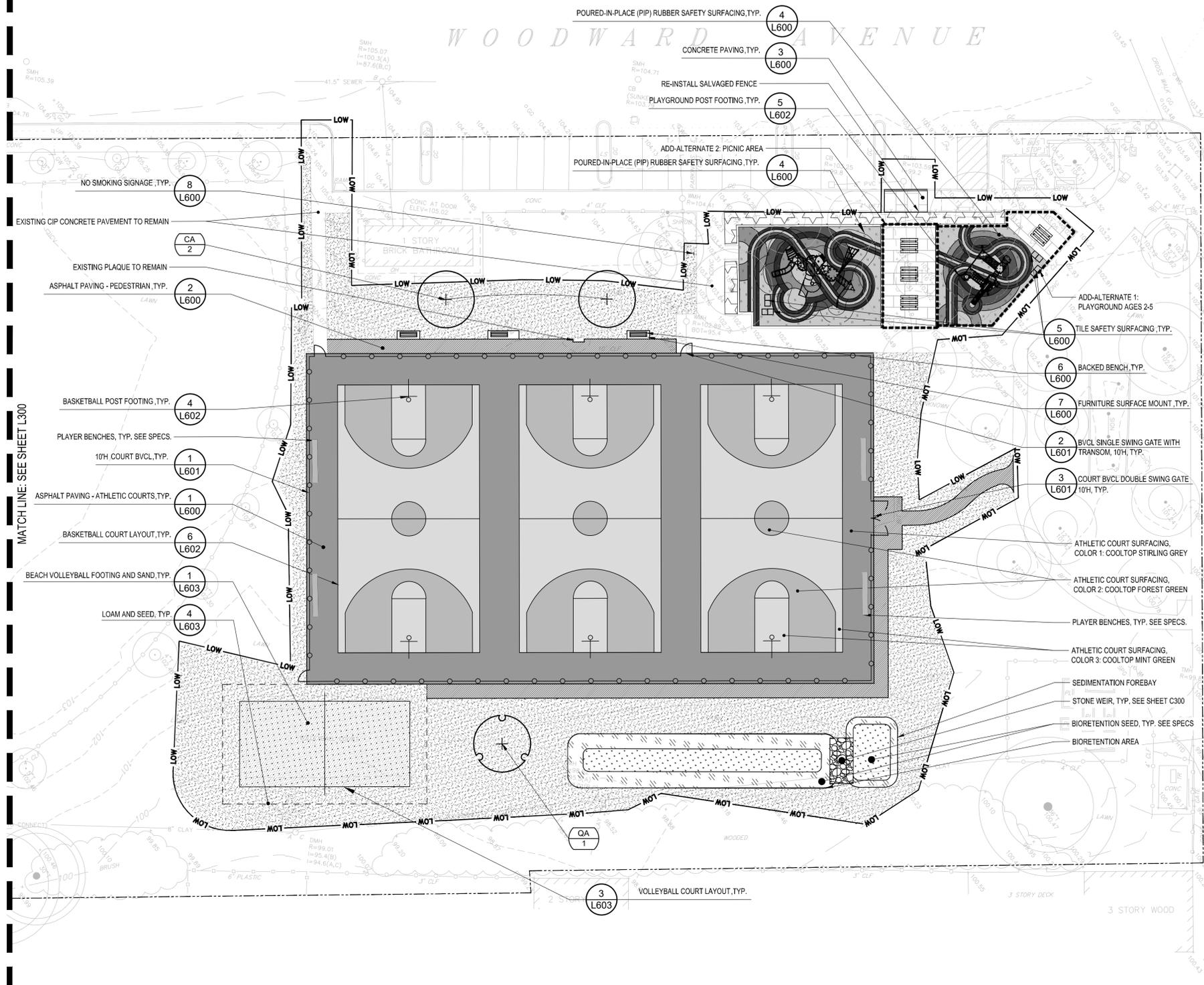
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Date: SEPTEMBER 20, 2024. Drawn By: JB. Reviewed By: JM. Approved By: CR.

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Drawing Title: GENERAL NOTES

Sheet Number: L001



LEGEND

- LOW — LIMIT OF WORK
- ADD ALTERNATE BOUNDARY
- [Pattern] SAND, TYP. (2) L603
- [Pattern] SEEDED LAWN, TYP. (4) L603
- [Pattern] BIORETENTION SEED 1, TYP.
- [Pattern] BIORETENTION SEED 2, TYP.
- [Pattern] POURED IN PLACE RUBBER SAFETY SURFACING, TYP. (4) L600
- [Pattern] ASPHALT PAVING - PEDESTRIAN, TYP. (2) L600
- [Pattern] CONCRETE PAVEMENT, TYP. (3) L600
- [Pattern] MULCH PLANTING BED, TYP. SEE SPECIFICATIONS.
- 10' HT. BVCL, TYP. (1) L601
- ▬ BACKED BENCH, TYP. (6) L600
- TILE SAFETY SURFACING, TYP. (5) L600

- ASPHALT PAVING ATHLETIC COURTS, TYP.:**
- [Color 1] COLOR 1: COOLTOP STIRLING GREY. SEE SPECIFICATIONS. (1) L600
 - [Color 2] COLOR 2: COOLTOP FOREST GREEN. SEE SPECIFICATIONS. (1) L600
 - [Color 3] COLOR 3: COOLTOP MINT GREEN. SEE SPECIFICATIONS. (1) L600

NOTE:
 1. SEE SHEET L001 FOR MATERIAL AND PLANTING NOTES.
 2. SEE SHEET L300 FOR PLANTING SCHEDULE.

Project: CITY OF LOWELL

FATHER MAGUIRE
 80 WOODWARD AVENUE
 LOWELL, MA

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No.	Date	Description

Revisions:

No.	Date	Description

COA:



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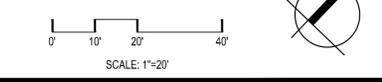
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Date: SEPTEMBER 20, 2024
 Drawn By: JB
 Reviewed By: JM
 Approved By: CR

W&S Project No.: ENC24-0401
 W&S File No.: ---

Drawing Title:
MATERIALS AND PLANTING PLAN

Sheet Number:
L301

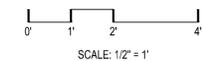


P:\Projects\2024\0401 - Enc24-0401 - Materials and Planting Plan\Drawings\20240920\20240920.dwg

LEGEND

- COLOR 1: ROYALE BLUE
SEE SPECIFICATIONS
- COLOR 2: SKY BLUE
SEE SPECIFICATIONS
- COLOR 3: HUNTER GREEN
SEE SPECIFICATIONS
- COLOR 4: BRIGHT GREEN
SEE SPECIFICATIONS

NOTE:
THIS SCOPE OF WORK IS INCLUDED WITHIN
ADD ALTERNATE 1



SCALE: 1/2" = 1'



Project: CITY OF LOWELL



FATHER MAGUIRE
80 WOODWARD AVENUE
LOWELL, MA

Weston & Sampson
Weston & Sampson Engineers, Inc.
85 Devonshire Street, 3rd Floor
Boston, MA 02109
978.532.1900 800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

COA:



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Scale: 1"=XX'

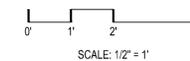
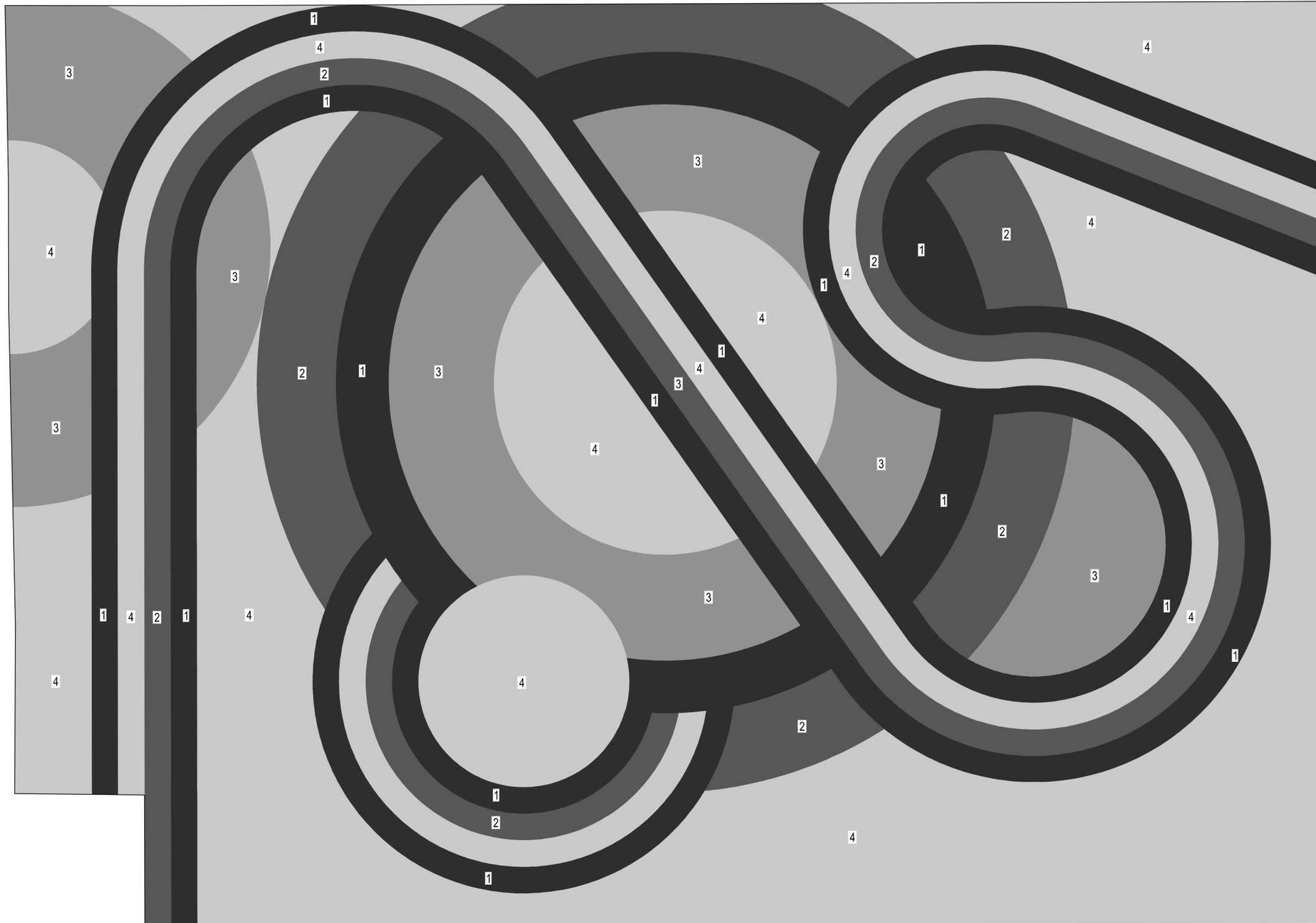
Date: SEPTEMBER 20, 2024
 Drawn By: JB
 Reviewed By: JM
 Approved By: CR
 W&S Project No.: ENC24-0401
 W&S File No.: ---

Drawing Title:
**PLAYGROUND AGES 2-5
PIP SAFETY SURFACING
PATTERN
ENLARGEMENT PLAN**

Sheet Number:
L302

LEGEND

- COLOR 1: ROYALE BLUE
SEE SPECIFICATIONS
- COLOR 2: SKY BLUE
SEE SPECIFICATIONS
- COLOR 3: HUNTER GREEN
SEE SPECIFICATIONS
- COLOR 4: BRIGHT GREEN
SEE SPECIFICATIONS



SCALE: 1/2" = 1'



Project: CITY OF LOWELL



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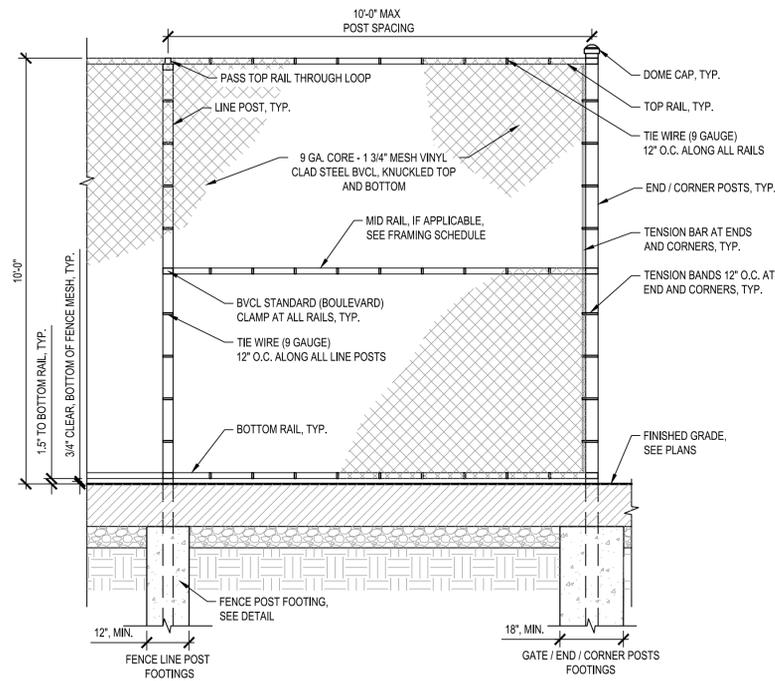
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Date: SEPTEMBER 20, 2024
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 Reviewed By: JM
 Approved By: CR
 W&S Project No.: ENC24-0401
 W&S File No.: ---

Drawing Title:
**PLAYGROUND AGES 5-12
 PIP SAFETY SURFACING
 PATTERN
 ENLARGEMENT PLAN**

Sheet Number:
L303



FRAMING SCHEDULE:

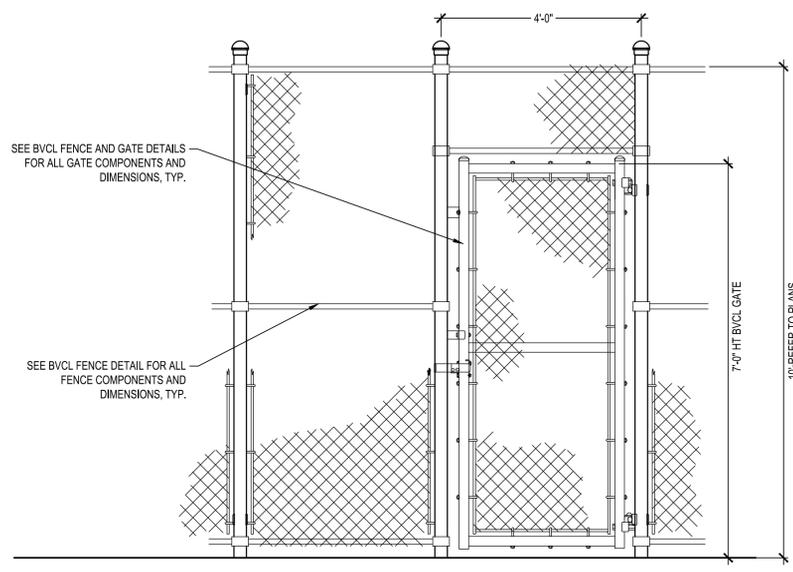
UP TO 6' HT. FENCING:
 LINE POST: 1 1/2" (1.900") O.D.
 TOP, BOTTOM RAIL: 1 3/8" (1.660") O.D.
 MID RAIL: 1 3/8" (1.660") O.D. ENDS / TERMINAL ONLY
 END & TERMINAL POST: 2 3/8" (2.375") O.D.

OVER 6' - 8' HT. FENCING:
 LINE POST: 2 3/8" (2.375") O.D.
 TOP, BOTTOM RAIL: 1 3/8" (1.660") O.D.
 MID RAIL: 1 3/8" (1.660") O.D. ENDS / TERMINAL ONLY
 END & TERMINAL POST: 2 3/8" (2.375") O.D.

OVER 8' - 10' HT. FENCING:
 LINE POST: 2 3/8" (2.375") O.D.
 TOP, BOTTOM RAIL: 1 3/8" (1.660") O.D.
 MID RAIL: 1 3/8" (1.660") O.D. ENDS / TERMINAL ONLY
 END & TERMINAL POST: 3 1/2" (3.500") O.D.

OVER 10' - 12' HT. FENCING:
 LINE POST: 3 1/2" (3.500") O.D.
 TOP, BOTTOM RAIL: 1 3/8" (1.660") O.D.
 MID RAIL: 1 3/8" (1.660") O.D. ENDS / TERMINAL ONLY
 IF 12' FENCE USED, INSTALL MID RAIL, 7' HT
 END & TERMINAL POST: 4" (4.000") O.D.

- NOTES:**
1. ALL FENCE FRAMEWORK SHALL BE POLYMER COATED HOT DIP GALV. SS-40 STEEL PIPE.
 2. ALL LINE POSTS SHALL BE INSTALLED EQUALLY SPACED BETWEEN END & CORNER POSTS.
 3. ALL CLAMPS, TIES, POST TOPS, BANDS, POSTS, ETC. SHALL BE POLYMER COATED TO MATCH FENCE FABRIC.
 4. REFER TO DETAIL AND SPECS FOR GATE REQUIREMENTS.
 5. SEE FRAMING SCHEDULE FOR PIPE SIZING.



GATE WITH TRANSOM ELEVATION

NOTE:

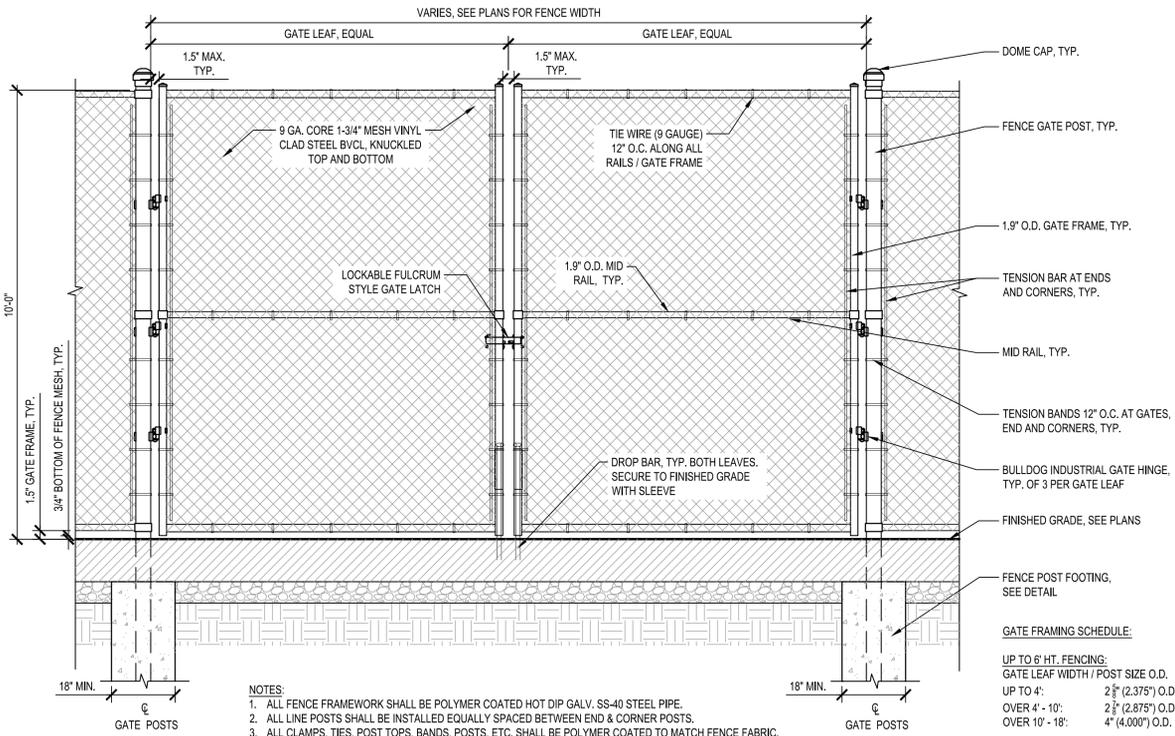
1. ALL GATE PLANS AND ELEVATIONS FOR LAYOUT REFERENCE ONLY.
2. SEE BVCL FENCE DETAIL FOR FRAMING SCHEDULE.

1 COURT BVCL
NOT TO SCALE

MA-LO-FAT-29

2 BVCL SINGLE SWING GATE WITH TRANSOM
NOT TO SCALE

MA-LO-FAT-82



GATE FRAMING SCHEDULE:

UP TO 6' HT. FENCING:
 GATE LEAF WIDTH / POST SIZE O.D.
 UP TO 4': 2 3/8" (2.375") O.D.
 OVER 4' - 10': 2 3/8" (2.875") O.D.
 OVER 10' - 18': 4" (4.000") O.D.

OVER 6' HT. - 12' HT. FENCING:
 GATE LEAF WIDTH / POST SIZE O.D.
 UP TO 6': 2 3/8" (2.875") O.D.
 OVER 6' - 12': 4" (4.000") O.D.
 OVER 12' - 18': 6 3/8" (6.625") O.D.
 OVER 18' - 24': 8 3/8" (8.625") O.D.

- NOTES:**
1. ALL FENCE FRAMEWORK SHALL BE POLYMER COATED HOT DIP GALV. SS-40 STEEL PIPE.
 2. ALL LINE POSTS SHALL BE INSTALLED EQUALLY SPACED BETWEEN END & CORNER POSTS.
 3. ALL CLAMPS, TIES, POST TOPS, BANDS, POSTS, ETC. SHALL BE POLYMER COATED TO MATCH FENCE FABRIC.
 4. REFER TO DETAIL AND SPECS FOR GATE REQUIREMENTS.
 5. SEE FRAMING SCHEDULE FOR PIPE SIZING.

3 COURT BVCL DOUBLE SWING GATE
NOT TO SCALE

MA-LO-FAT-30

4 COURT PAVING MOW STRIP
NOT TO SCALE

MA-LO-FAT-103

Consultants:

Revisions:

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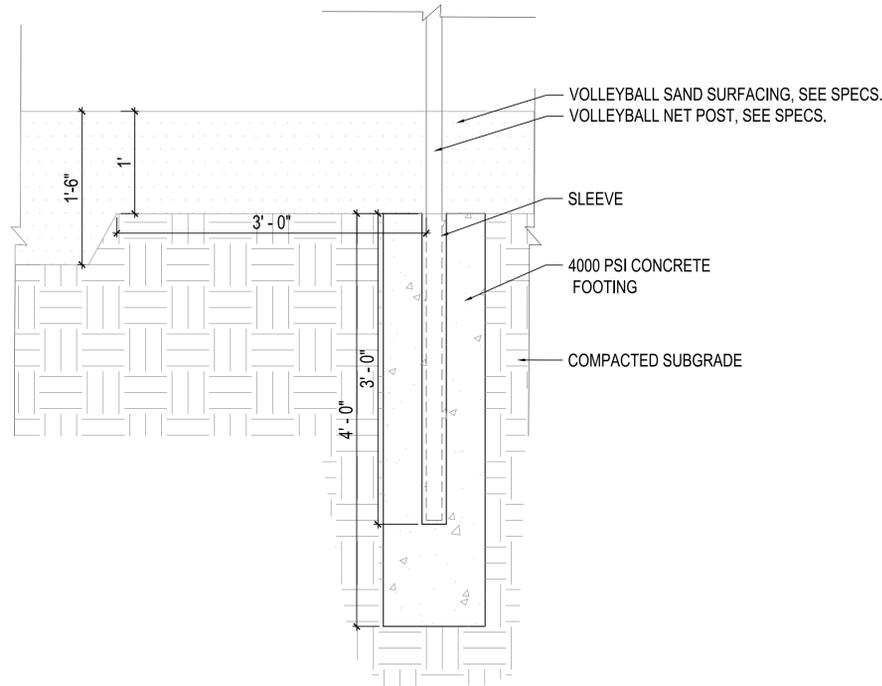
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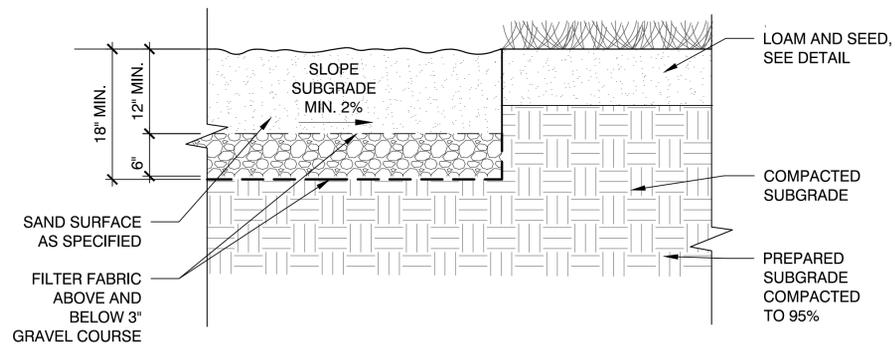
Date: SEPTEMBER 20, 2024
 Drawn By: JB
 Reviewed By: JM
 Approved By: CR
 W&S Project No.: ENG24-0401
 W&S File No.: ---

Drawing Title: **LANDSCAPE DETAILS**

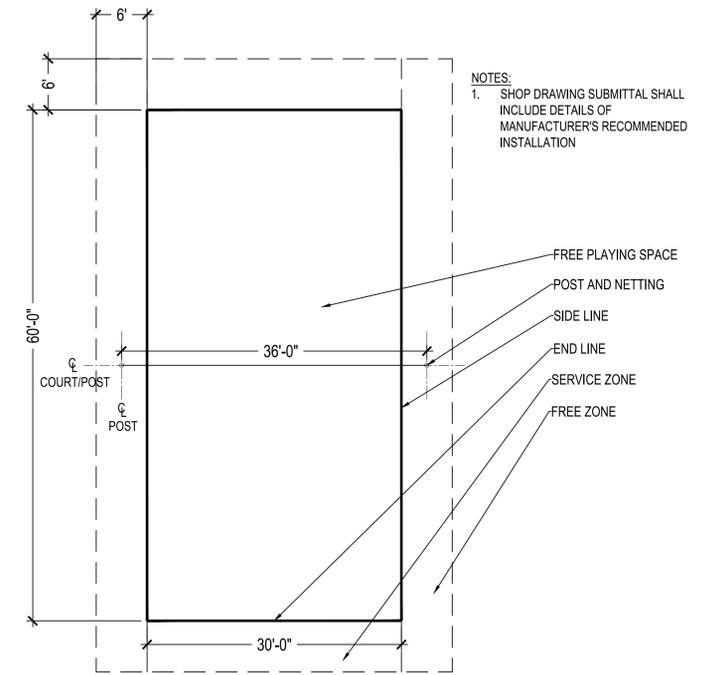
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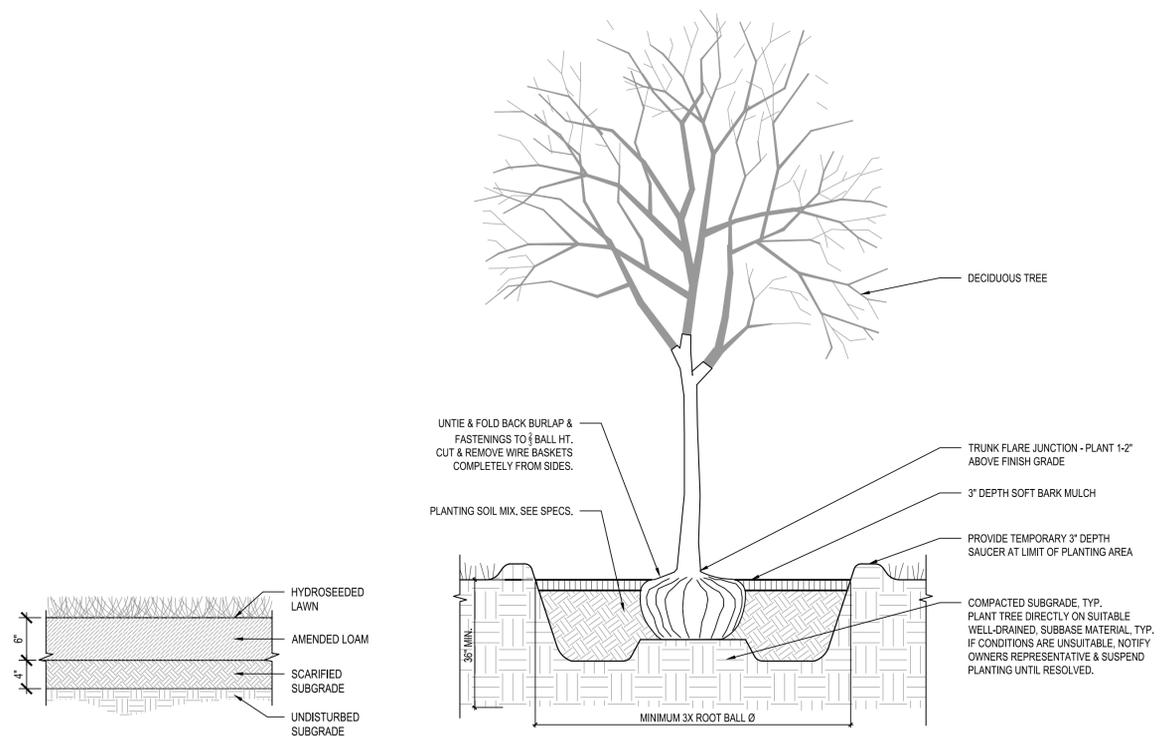
1 BEACH VOLLEYBALL FOOTING AND SAND
NOT TO SCALE



2 VOLLEYBALL SAND PROFILE
NOT TO SCALE



3 VOLLEYBALL COURT LAYOUT
NOT TO SCALE



4 LOAM AND SEED, TYP.
NOT TO SCALE
MA-LO-FAT-01

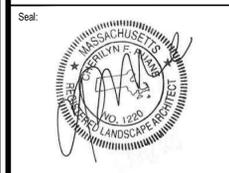
5 TREE PLANTING
NOT TO SCALE

Consultants:

Revisions:

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COA:



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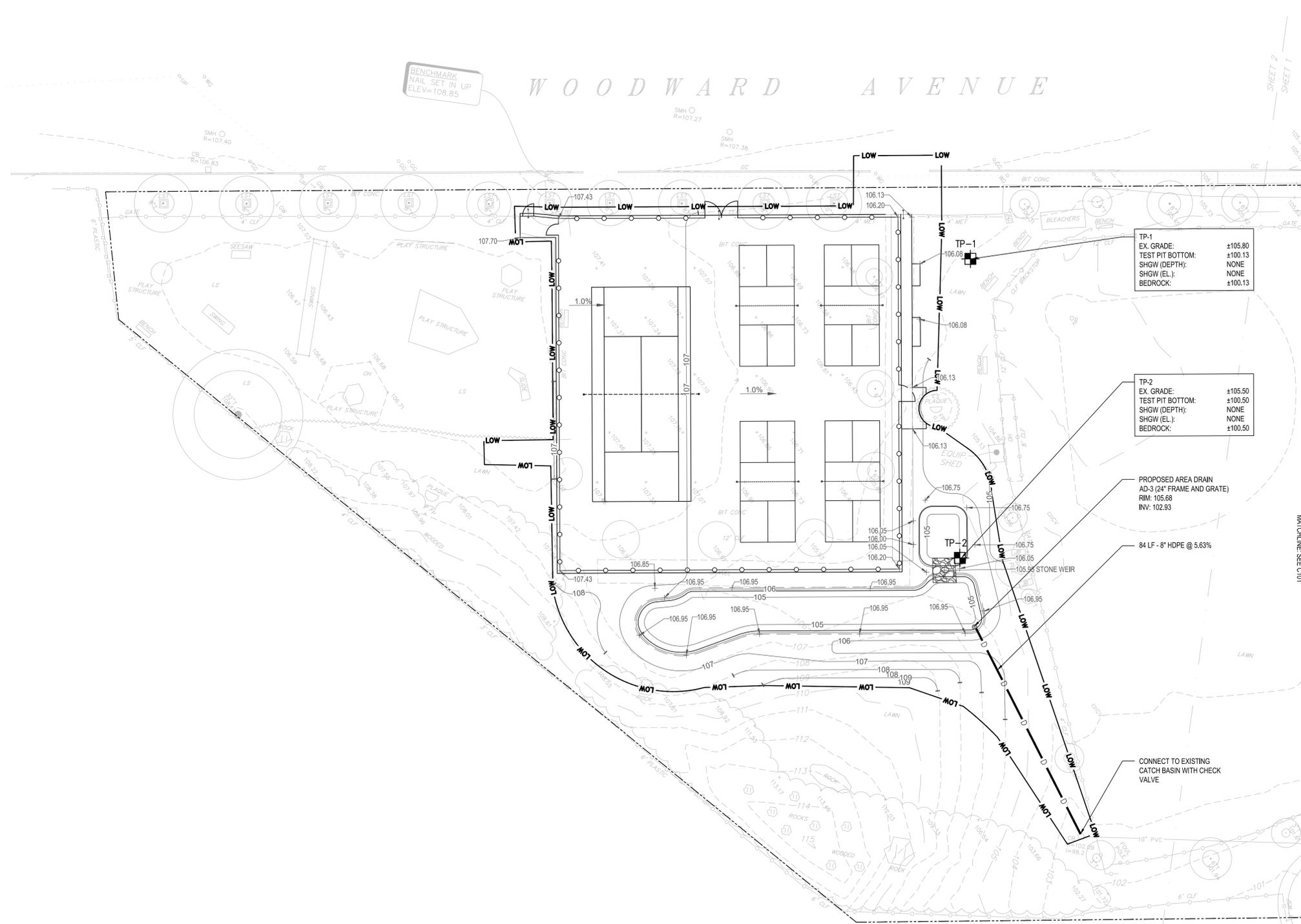
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 Drawn By: JB
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 Approved By: CR
 W&S Project No.: ENG24-0401
 W&S File No.: ---

Drawing Title:
LANDSCAPE DETAILS

Sheet Number:
L603

WOODWARD AVENUE



LEGEND

- LIMIT OF WORK
- PROPERTY LINE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED TREELINE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- TOP & BOTTOM OF CURB
- TOP & BOTTOM OF WALL
- MATCH EXISTING SURFACE WITH PROPOSED
- SLOPE ARROW
- DRAINAGE MANHOLE
- AREA DRAIN
- DRAINAGE PIPE
- TEST PITS

ABBREVIATIONS

- INV INVERT
- LF LINEAR FEET
- RCP REINFORCED CONCRETE PIPE
- EX EXISTING
- FES FLARED END STRUCTURE
- VIF VERIFY IN FIELD
- TOE TOP OF EDGE
- BOE BOTTOM OF EDGE

TP-1
 EX. GRADE: ±105.80
 TEST PIT BOTTOM: ±100.13
 SHGW (DEPTH): NONE
 SHGW (EL.): NONE
 BEDROCK: ±100.13

TP-2
 EX. GRADE: ±105.50
 TEST PIT BOTTOM: ±100.50
 SHGW (DEPTH): NONE
 SHGW (EL.): NONE
 BEDROCK: ±100.50

PROPOSED AREA DRAIN
 AD-3 (24" FRAME AND GRATE)
 RM: 105.68
 INV: 102.93

84 LF - 8" HDPE @ 5.63%

CONNECT TO EXISTING CATCH BASIN WITH CHECK VALVE

Project: CITY OF LOWELL

 FATHER MAGUIRE
 80 WOODWARD AVENUE
 LOWELL, MA

Weston & Sampson
 Weston & Sampson Engineers, Inc.
 85 Devonshire Street, 3rd Floor
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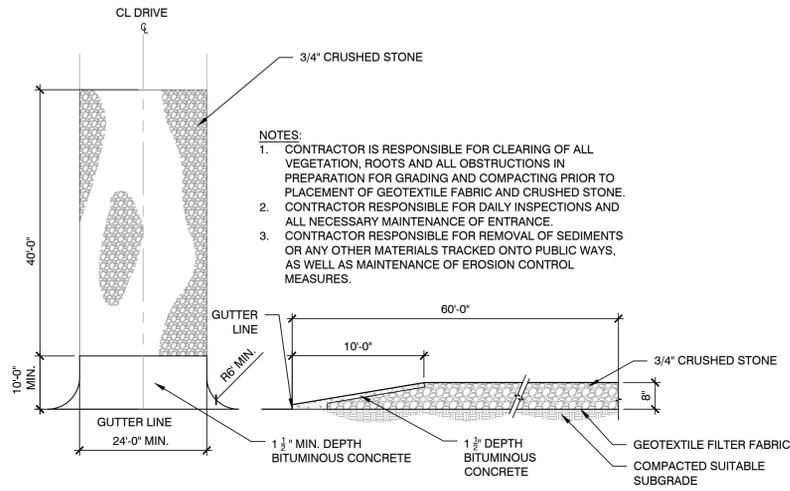
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 W&S File No.: ---

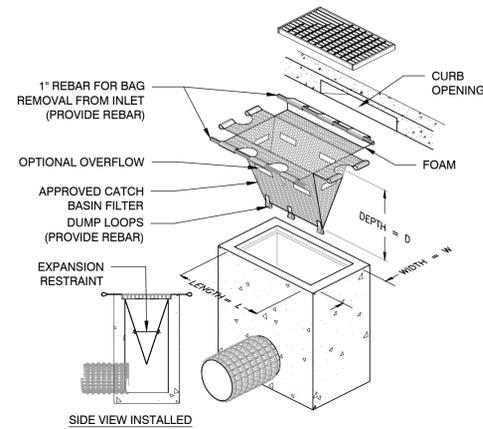
Drawing Title:
DRAINAGE & UTILITY PLAN

Sheet Number:
C100





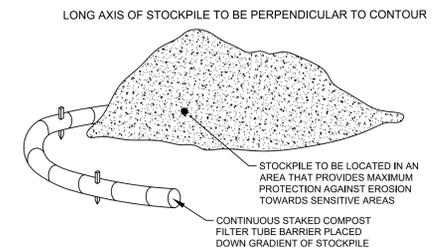
1 STABILIZED TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:

1. CATCH BASIN FILTER FOR PAVED AREAS SHALL BE PROVIDED FOR ALL DRAINAGE STRUCTURES WITHIN THE LIMIT OF WORK AND ANY STRUCTURES OUTSIDE THE PROJECT TERMINI THAT ARE AFFECTED BY CONSTRUCTION.

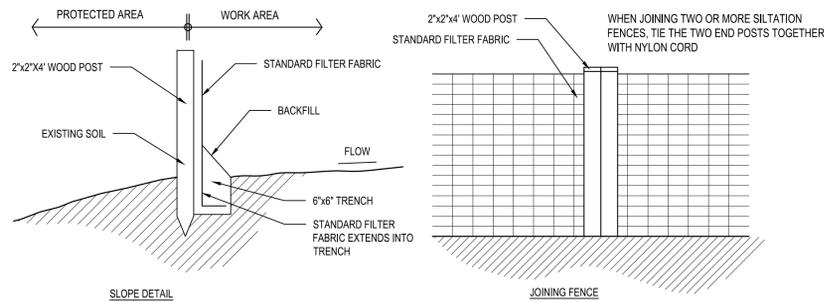
2 INLET SEDIMENT CONTROL
NOT TO SCALE



NOTE:

1. PROVIDE PLASTIC SHEETING, EROSION BLANKET, OR GRASS SEEDING OF THE STOCKPILE FOR STOCKPILES THAT ARE EXPECTED TO REMAIN UNDISTURBED IN PLACE FOR THE DURATION OF CONSTRUCTION ACTIVITY.

3 MATERIAL STOCKPILE
NOT TO SCALE



4 SILT FENCE
NOT TO SCALE

Consultants:

Revisions:

No.	Date	Description

COA:

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 Approved By: CR
 W&S Project No.: ENG24-0401
 W&S File No.: ---

Drawing Title:
EROSION & SEDIMENT CONTROL DETAILS

Sheet Number:
C200

