

by Designer based on weight and type of dumpster removal vehicle.

CONCRETE CURB & GUTTER: Shall be provided at all concrete and asphalt paved areas as required.

GRAVEL SERVICE ROADS: Use of gravel surfaced roads is prohibited unless directed otherwise.

PARKING LOT STRIPING: Parking lot striping shall be painted in white. Blue lines may supplement white parking lot striping in parking spaces designated for use by persons with disabilities.

DIVISION 32 18 00 - ATHLETIC PAVING AND SURFACE

Grading and marking of athletic paving and surfaces shall be in compliance with National Federation High School Association Standards as adopted by the TSSAA. Copies of the standards are available by contacting the MSCS PM. Detail and specify striping of all play courts provided.

TENNIS COURT SURFACING: Basis of Design shall be 2" asphalt surfacing on 6" compacted stone base course.

TRACK SURFACING: Basis of design for High School tracks shall be rubberized latex surfacing on 2 inches I-2 asphalt surfacing on 6 inches of compacted stone base course. SBR (styrene-butadiene rubber) rubber particles or EPDM (ethylene-propylene-diene rubber) rubber may be used for the surfacing. Middle School tracks shall be 2" asphalt surfacing on 6" compacted stone base course. At Elementary Schools provide oval 220 yd. track with screenings for surface at elementary sites.

OUTDOOR BASKETBALL COURTS AND HARD SURFACE PLAY AREAS: Basis of Design shall be 4" asphalt surfacing on 6" compacted stone base course.

TRACK SURFACING: Track surfacing of new tracks shall slope 2% towards infield to a perimeter drainage system. At existing sites where drainage systems do not exist, it is acceptable to slope 2% away from infield. An alternate shall be provided to incorporate a perimeter drainage system. Two 4" diameter empty conduits with accessible termination boxes shall be provided under track installations for future water and power lines.

- The purpose of this project is to design, prepare, and install a new synthetic turf area that meets safety standards, enhances aesthetics, and provides a durable, low-maintenance surface for children. Construction of a new synthetic turf Area including site preparation, drainage, base construction, turf installation, field markings, and ancillary features to meet all Tennessee standards.
- MSCS will mandate a Design-Build delivery method to be used in construction where a single entity—known as the design-builder—is responsible for both the design and construction of the New Turf Area project.
- Single Point of Responsibility: The owner contracts with one entity for both design and construction, simplifying communication and accountability.
- Integrated Team: Designers and builders work collaboratively from the beginning, which can lead to better coordination and innovation.
- Faster Delivery: Because design and construction phases can overlap, projects often finish sooner.
- Cost Efficiency: Early collaboration can help control costs and reduce change orders
- Surveying and Layout: Confirm field dimensions and orientation. Survey and mark the designated area.
- Clearing and Grubbing: Remove vegetation, debris, and unsuitable materials. Remove existing surface materials (grass, soil, concrete, etc.).
- Excavation and Grading: Excavate to subgrade and grade for proper drainage. Excavate to required depth for turf system.

- Grade and compact sub-base to ensure proper drainage and stability

Drainage System

- Subsurface Drainage: Install perforated drainage pipes and gravel trenches.
- Stormwater Management: Connect to existing stormwater system or install retention/detention features as required.
- Install subsurface drainage if required
- Ensure proper slope for drainage
- Connect to existing stormwater system or provide alternative drainage solutions

Base Construction

- Subbase Layer: Install compacted crushed stone or aggregate base.
- Laser Grading: Ensure precise leveling for turf installation.
- Install geotextile fabric for weed control.
- Lay and compact crushed stone or aggregate base (typically 4–6 inches).
- Ensure proper slope for drainage

Synthetic Turf Installation

- Turf System: Supply and install approved synthetic turf system with infill (e.g., rubber, sand).
- Seaming and Adhesives: Secure turf panels with appropriate adhesives and seam tape.
- Infill Distribution: Evenly distribute infill material to manufacturer specifications.
- Supply and install synthetic turf designed for use.
- Include padding or shock-absorbing underlayment to meet ASTM F1292 impact attenuation standards.
- Seam and secure turf using industry-standard adhesives and techniques.
- Infill turf with appropriate materials (e.g., rubber granules, sand) as specified
- Install perimeter edging (e.g., concrete curbing, timber borders) to contain turf and infill.
- Ensure smooth transitions between turf and adjacent surfaces
- Construct pedestrian paths and ADA-compliant access

Field Markings and Accessories (alternate #1)

- Line Markings: Permanent inlaid markings for soccer field dimensions.
- Goals and Equipment: (alternate #1) Install soccer goals, nets, and corner flags. Install new playground, sports equipment/structures per manufacturer specifications. Ensure equipment is anchored securely and meets safety standards
- Perimeter Fencing: (alternate #1) Optional fencing for safety and security.

Ancillary Work (alternate #2)

- Lighting (if applicable): Install LED sports lighting system.

- Landscaping: Restore surrounding areas with grass, mulch, or other landscaping.

Quality Assurance and Testing

- Compaction Testing: Verify base compaction meets specifications.
- Drainage Testing: Confirm proper water flow and drainage.
- Turf Inspection: Ensure turf installation meets manufacturer and performance standards.
- Permitting, Landscaping outside the designated turf area, Lighting or irrigation systems unless specified. And inspection fees unless otherwise noted will be carried by Controlling Contractor in all cases.
- Clean up site and remove debris daily.

Closeout and Warranty

- Final Walkthrough: Conduct inspection with stakeholders Inspect turf and equipment installation for compliance with safety and quality standards.
- Documentation: Provide warranties, maintenance manuals, and as-built drawings.
- Training: Offer basic maintenance training to facility staff.
- Provide maintenance guidelines and warranty documentation.

DIVISION 32 31 00 - FENCING

Fencing is required for security around exterior mechanical equipment areas. It may be installed for security and sport function at tennis courts, high school baseball and softball fields. Where equipment enclosure fencing is adjacent to main buildings, it is desirable for fence construction to match building construction.

CHAIN LINK FENCING: Black LLDPE/PVC coated steel chain link fence and gates with all accessories, fittings, and fastenings, including bottom tension wire, to be obtained from the fence manufacturer. Fabric of fence shall have knuckled selvage at both top and bottom. Do not extend fabric above top rail. Install selvage at base of fence.

MECHANICAL EQUIPMENT AREAS: Shall be enclosed with a fence, a minimum of 6'-0 high. Provide clearance around equipment as required for service and operation. Gates shall be a minimum of 4'-0 wide. Fence posts shall be installed within the concrete slab provided around and under the equipment. Provide enclosure size sufficient for all required maintenance activities.

PRE-K PLAY AREA: Basis of Design shall be enclosed with a 4'-0" high chain link fence.

CLASSROOM/ AUXILIARY ADDITIONS: Walkways between buildings that are exposed to public access shall be secured with fencing and gates. Gates shall be controlled access and include gates for lawn care equipment and large vehicular access. Fence type may be monumental if fencing can be seen from public streets.

DIVISION 32 90 00 - LANDSCAPE PLANTING

Landscape planting offers a cost effective means to enhance overall project appearance, provide privacy at outdoor learning areas and provide summer sun shading and winter wind breaks. All species shall be of hearty,