



City of Troy Parks and Recreation

Park Facility Standards Manual

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Section 01

SURFACING

01

- Concrete
- Stone Dust
- Asphalt
- Non-Athletic Grass Surfaces
- Athletic Grass Surfaces
- Infied Mix

CONCRETE

General Information

- Concrete paving material is to be used where a rigid, non-slip circulation system is desired.
- Walkway widths will vary depending on location, use, and user density
- Final concrete section shall be confirmed during the design phase depending on applicable use
- Control joints shall be hand troweled and placed at a maximum of 5' O.C.
- Surface shall have medium broom finish perpendicular to traffic pattern
- Concrete walking paths shall have a maximum longitudinal slope of 5% and a maximum cross slope of 2%

General Design Specifications

- Concrete shall be cast -in-place and 4" thick over 6" of compacted pavement granular subbase material
- Concrete shall be required to meet the determined compressive strength, air entrainment, and slump, as specifies by the design engineer
- Concrete shall have welded wire mesh reinforcements
- Expansion joints shall be placed between adjacent slabs, at building line, at curbs, or at penetrating structures at a maximum of 20' O.C., and filled with pre-molded expansion joint filler



STONE DUST

01

General Information

- Stone dust material is to be used where an informal, porous circulation system is desired.
- Walkway widths will vary depending on location, use, and user density
- Final path section shall be confirmed during the design phase depending on applicable use

General Design Specifications

- Path cross section shall include 4" compacted pavement subbase course (DGA) that extends 6" beyond the edge of the top 3" layer of $\frac{1}{4}$ " minus stone screening
- Geotextile stabilization fabric, Mirafi 500X, shall be installed beneath the subbase course
- Metal edging shall be installed along edges of stone dust path that do not abut a rigid surface material
- Stone dust walking paths shall have a maximum longitudinal slope of 5% and a maximum cross slope of 2%
- Minimum slope shall be 1% in any direction



ASPHALT

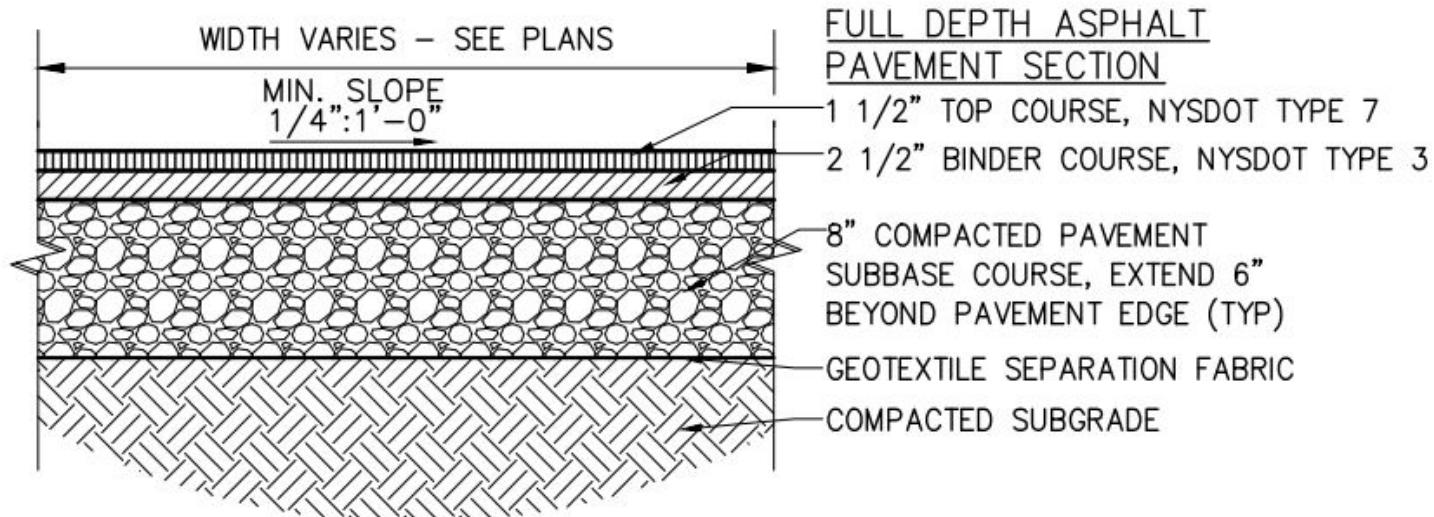
General Information

- Asphalt paving material is to be used where a smooth, joint free circulation system is desired.
- Walkway widths will vary depending on location, use, and user density
- Final asphalt section shall be confirmed during the design phase depending on applicable use

01

General Design Specifications

- Asphalt cross section shall be 8" of subbase material (NYSDOT Type 2 or Type 4, A.O.B.E.), 2 $\frac{1}{2}$ " binder course (NYSDOT Type 3), and 1 $\frac{1}{2}$ " top course (NYSDOT Type 7) on compacted subgrade
- Geotextile separation fabric shall be installed beneath the subbase course
- Asphalt walking paths shall have a maximum longitudinal slope of 4.8% and a maximum cross slope of 1.8%



NON-ATHLETIC GRASS SURFACES

General Information

- Non-athletic areas are comprised of all mown areas within the park that are not formay designated sports fields. This includes all free-play spaces.

Fertilizer

- Commercial fertilizer (5-10-5) inorganic, or organic, containing not less than five (5) percent nitrogen, ten (10) percent available phosphoric acid, and five (5) percent water soluble potash.
- If, as an alternative, the Contractor wishes to substitute for commercial fertilizer 5-10-5, another commercial fertilizer with a 1-2-1 ratio, such as 10-20-10 or 6-12-6, they may do so with the approval of the engineer and the rate of fertilizer to be used shall be whatever amount is required to furnish the same amount of nitrogen as would be supplied by the 5-10-5.

Seed

- Seed shall be fresh, clean, new-crop seed mixed in the proportions specified for species and variety, conforming to Federal and State Standards.
- Use the following standard mixture blue seal classic, unless a special mixture is otherwise indicated or approved by the engineer

SPECIES	% BY WEIGHT	% BY PURITY	% BY GERMINATION
Kentucky Bluegrass*	60	85	80
Creeping Red Fescue	20	95	85
Perennial Rye	20	95	85

**Kentucky Bluegrass must consist of a minimum of two varieties.*

Mulch

- Provide and install a mulch adequate to protect the seeding during its growing period. It shall be the responsibility of the Contractor to determine the appropriate mulching techniques for the particular site conditions and acquire approval of the same from the engineer.

Water

- Water: Clean and potable

ATHLETIC GRASS SURFACES

General Amended Topsoil Specifications

- Existing geotechnical reports shall be reviewed prior to amending soil. Final mix shall be determined during design depending on applicable use.
- Topsoil may be imported if existing topsoil is not deemed acceptable for use in the Rootzone Mix, or if additional quantities are required
- Imported Topsoil shall be natural, fertile, sandy loam as classified by the US Department of Agriculture Soil Classification System, typical of the cultivated topsoil of the locality
- The amended topsoil rootzone mix shall meet the following performance requirements:
 - Organic Matter Content: Not less than 4% or more than 5% by weight, of decayed organic matter as determined by ASTM F1647.
 - 3/4" screened to produce a material free from sub-soil, large stones, earth clods, sticks, stumps, clay lumps, roots or other extraneous matter or debris.
 - Free of Quackgrass rhizones, Agropyron Repens, Nutgrass tubers, Cyperus Esculentus, and all other primary noxious weeds.
 - pH range between 6.0 and 7.0.
 - Shall conform to following particle size distribution, as determined by the pipet method in compliance with ASTM F1632 or ASTM D422
 - 50% of the sand fraction shall be medium sand or coarser (greater than .25 mm)
 - Maximum particle size shall have a diameter of 0.5 inches (1.27 cm).
 - Rootzone bulk density shall be between 1.45 and 1.6.
 - Ratios of nitrate, phosphorus, magnesium manganese, iron, zinc and calcium as recommended by Testing Agent.

General Sodded Athletic Field Specifications

Fertilizer

- Commercial starter fertilizer (19-26-5) with fine particles, chemically homogeneous, having a minimum 75% of total nitrogen (19%) derived from urea and methylene ureas and a minimum of 26% monoammonium phosphate.
- The POLY-S fertilizer shall be a 19-3-19* analysis, uniform particle size, have a minimum of 97% of the total nitrogen (19%) derived from polymer encapsulated coated urea, a minimum of 3% monoammonium phosphate and 19% from potassium sulfate.
- The POLY-S product NPK Turf Fertilizer with Minors (19-3-19) shall be applied as specified.

Grass Materials

- Sod: Provide machine-cut, strongly rooted, certified turf grass sod, at least 18 months old and free of weeds, non-organic contaminants and undesirable native grasses. Provide sod capable of vigorous growth and development when planted and complying with the following requirements
 - Type: Sod shall consist of a mixture of 80% Kentucky bluegrass and 20% perennial rye grass. The mixture shall be a three seed bluegrass mix. Contractor shall submit mix for approval by Landscape Architect.
 - Sod Roll Size: Uniform thickness of 1 inch, plus or minus 1/8 inch (.31cm), measured at time of cutting and excluding top growth and thatch. Provide turf that measures a minimum of 24 inches wide and 50 feet in length. Broken or torn rolls or rolls with uneven ends are not acceptable.
 - Sod Strength: Provide sod pads capable of supporting their own weight and retaining size and shape when supplier's standard size pad is suspended vertically from a firm grasp on upper 10 percent of the pad.
 - Grown on a sand-based soil (Sandy Loamy Sand or Sandy Loam). Sod grown on a muck soil bed is not allowed.

Water

- Clean, potable

INFIELD MIX

General Mix Information

- All mixes shall be confirmed during the design phase depending on applicable use

General Baseball Infield Mix Specification

- Diamond Tex Premium," by Diamond Tex, DiamondTex.com. Infield mix shall conform to the following specifications:

ASTM D422 SIEVE ANALYSIS	
SIEVE SIZE	PERCENT PASSING
#4	100.0%
#8	96.7%
#10	92.3%
#16	83.0%
#30	74.5%
#50	68.4%
#100	59.7%
#200	46.6%

ASTM D 698 STANDARD PROCTOR ANALYSIS	
Optimum Moisture Content	11.0%
Maximum Dry Density (Loose):	
LB/Cu. Ft.	124.7
TN/Cu. Yd.	1.68
Maximum Wet Density (Compacted):	
LB/Cu. Ft.	138.4
TN/Cu. Yd.	1.87

ASTM PARTICLE SIZE ANALYSIS SIEVE ANALYSIS SOIL CLASSIFICATION	
Sand	51%
Silt	33%
Clay	16%

General Warning Track Mix Specifications

- Warning Track Mix" by: Diamond Tex. Warning track mix shall conform to the following specifications:

ASTM D422 SIEVE ANALYSIS	
SIEVE SIZE	PERCENT PASSING
#4	100.0%
#8	76.0%
#10	67.0%
#16	49.0%
#30	33.0%
#50	24.0%
#100	19.0%
#200	16.0%

ASTM D 698 STANDARD PROCTOR ANALYSIS	
Optimum Moisture Content	8.1%
Maximum Dry Density (Loose):	
LB/Cu. Ft.	134.2
TN/Cu. Yd.	1.81
Maximum Wet Density (Compacted):	
LB/Cu. Ft.	145.1
TN/Cu. Yd.	1.96

ASTM PARTICLE SIZE ANALYSIS SIEVE ANALYSIS SOIL CLASSIFICATION	
Sand	84%
Silt	12%
Clay	4%

General Sand Specifications

- The sand shall be clean and sharp and free from lumps and foreign matter. Sand shall conform to grading requirements as follows:

PASSING	PERCENTAGE
1/4" screen	100%
#4 screen	98 – 100%
#10 screen	90 – 98%
#18 screen	80 – 95%
#35 screen	65 – 85%
#16 screen	20 – 40%
#140 screen	0 – 10%
#270 screen	0 – 2%

General Mound and Home Plate Mix Specifications

- Diamond Pro mound/home plate clay, 3-inch depth, by Diamond Tex, diamondtex.com.

Section 02

LANDSCAPING

02

Plantings
Maintenance
Mulch
Landscape Edging

PLANTINGS

General Information

- Use native species, where possible
 - No known invasive or nuisance per DEC https://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf

2

- Plantings can have fruit, but those bodies shall be 1/2" or less in size

Trees

- Recommended minimum install sizes to balance optimal health, growth, and maintenance concerns
 - Large Deciduous Trees: 2.5"-3" Caliper
 - Small Deciduous Trees: 2"-2.5" Caliper
 - Coniferous Trees: 6' Height
- Recommended cleaning deadwood and pruning at least once a year
- Mulching for the first 4 years and then a determination can be made if the plant location warrants mulching
- Trimming should be limited to providing enough vertical clearance for users on walkways



Shrubs and Perennials

- Recommended minimum install sizes to balance optimal health, growth, and maintenance concerns
 - Shrubs - 24" Height
 - Perennials - 1 Gallon
- Hardy shrubs should be used over annual plants for lower maintenance efforts
- Recommended cutting back of grasses in winter/spring
- Mulching for the first 4 years and then a determination can be made if the plant location warrants mulching
- Shrubs should be allowed to grow into their natural habit with minimal pruning
- Shrubs should have "holes" cut in their exterior branching to allow sunlight into the interior of the plant for plant health, aeration and canopy density

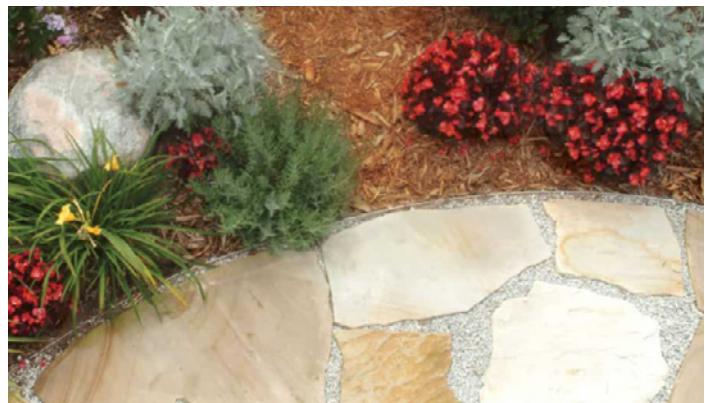


MULCH & LANDSCAPE EDGING

Mulch

2

- Mulch used for all plantings shall be dark brown shredded hardwood
- Avoid volcano mulching, excessively mulching up the trunk of trees (see photo). The trees root flare/ collar should be free of mulch
- Minimum 3" of mulch within planting beds and around trees



Landscape Edging

- Landscape Edging is used to define planting beds and mulched areas around trees.
- Shall be hand spaded edge or a metal edge
- Hand spaded edging shall be completed with a rectangular 13" steel tapered blade
- Edge should be established at least 4" deep
- Metal edging is often used when landscape beds are adjacent to a walkway or other hardscape
- Metal edging shall be standard commercial-steel edging, fabricated in sections of standard lengths, with loops stamped from or welded to face of sections to receive stakes.
- Edging shall be 1/4" wide by 5-1/2" deep with a mill finish
- Stakes shall be tapered steel and 12" long

Section 03

SPORTS COURTS AND FIELDS

03

Basketball
Tennis
Pickleball
Football
Soccer
Baseball and Softball

BASKETBALL

General Information

- Final court sizes and cross sections shall be confirmed during design phase depending on applicable use

General Court Cross Section Specifications

New Courts

- Court cross section shall consist of 6" compacted pavements subbase, 2½" asphaltic concrete binder course, 1½" asphaltic concrete top course, and painted court surfacing
- Court painted surfacing shall be acrylic standard court paint in gray and dark green



Refurbished Courts

- Court cross section shall consist of existing asphaltic concrete basketball court surface (true and level surface before applying top course), 1½" asphaltic concrete top course, and painted court surfacing
- Court painted surfacing shall be acrylic standard court paint in gray and dark green

General Basketball Goal Specifications

- Pole shall be gooseneck 5-9/16th OD pole
- Pole shall have a 6' extension with sway braces
- Pole shall be item # 39180M from Douglas Industries Inc., or approved equal
- Pole footing shall be 48" minimum bury depth
- Backboard shall be 42" x 60", steel with orange target
- Backboard shall be item #39161 from Douglas Industries Inc., or approved equal
- Goal shall be item #39157 from Douglas Industries Inc., or approved equal
- Installation shall be completed in accordance with manufacturer's specifications

General Fencing Specifications

- Fence surrounding basketball courts shall be 8' height (minimum) chain link fence
- Refer to fence section for more information

TENNIS COURTS

General Information

- Final court sizes, spacing and cross sections shall be confirmed during design phase depending on applicable use

General Court Cross Section Specifications

New Courts

- Court cross section shall consist of 6" compacted pavements subbase, 2" asphaltic concrete binder course, 1½" asphalt top course, 2 applications of acrylic resurfacer/filler course, 2 applications of colored acrylic texture course and 1 application of textured playing lines
- Colored court texture course shall be green

Refurbished Courts

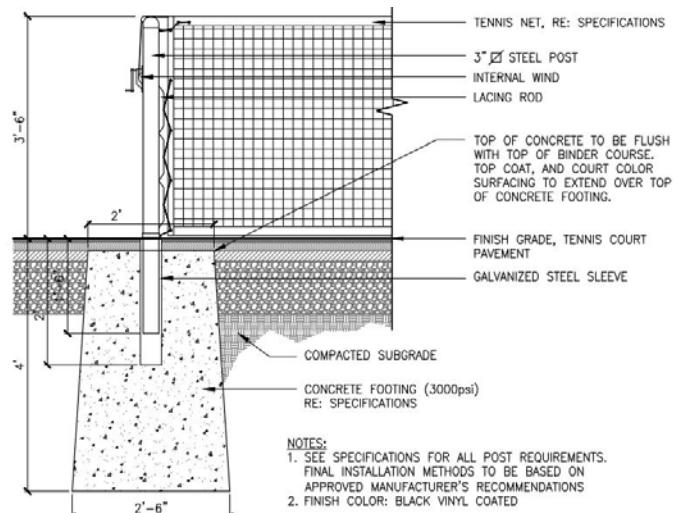
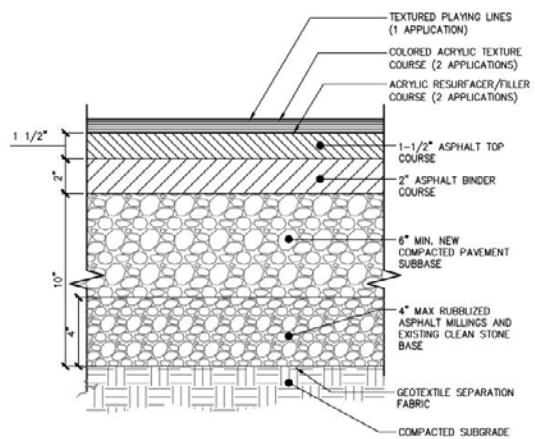
- Court cross section shall consist of existing asphaltic concrete tennis court surface (true and level surface before applying top course), 1½" asphalt top course, 2 applications of acrylic resurfacer/filler course, 2 applications of colored acrylic texture course and 1 application of textured playing lines
- Colored court texture course shall be green

General Nets and Posts Specifications

- Tennis post and ground sleeves shall be 3½" OD with net tightener, top pully, and removable or folding winder handle
- Tennis net shall be heavy duty, #36 Nylon with weather resistant vinyl topped binding and vinyl coated cable

General Fencing Specifications

- Fencing surrounding tennis courts shall be 10' high chain link fence.
- Refer to fencing section for more information
- Wind screening shall be vinyl Coated polyester panels, weather resistant, woven open mesh curtain, weight approximately 7.3 ounces per square yard



PICKELBALL

General Information

- Final court sizes, spacing and cross sections shall be confirmed during design phase depending on applicable use

03 General Court Cross Section Specifications

New Courts

- Court cross section shall consist of 6" compacted pavements subbase, 2" asphaltic concrete binder course, 1½" asphalt top course, 2 applications of acrylic resurfacer/filler course, 2 applications of colored acrylic texture course and 1 application of textured playing lines
- Colored court texture course shall be green

Refurbished Courts

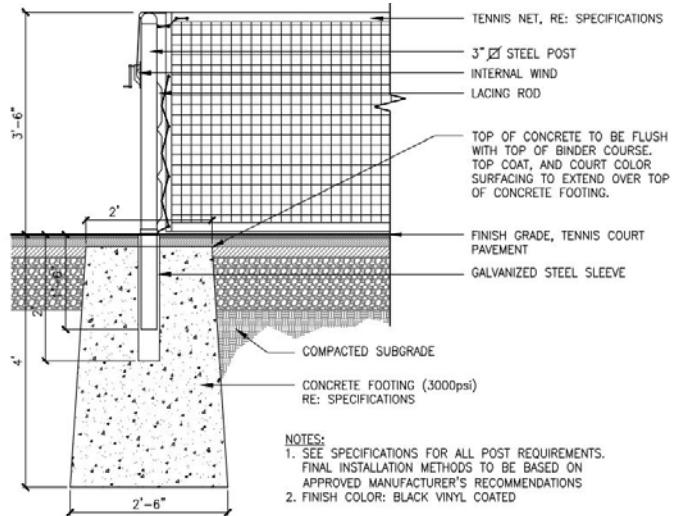
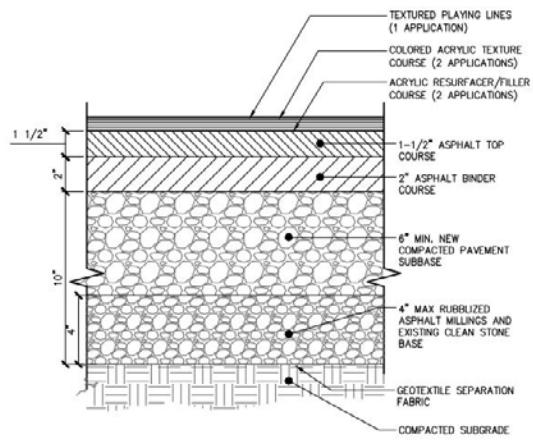
- Court cross section shall consist of existing asphaltic concrete tennis court surface (true and level surface before applying top course), 1½" asphalt top course, 2 applications of acrylic resurfacer/filler course, 2 applications of colored acrylic texture course and 1 application of textured playing lines
- Colored court texture course shall be green

General Nets and Posts Specifications

- Tennis post and ground sleeves shall be 3½" OD with net tightener, top pully, and removable or folding winder handle
- Tennis net shall be heavy duty, #36 Nylon with weather resistant vinyl topped binding and vinyl coated cable

General Fencing Specifications

- Fencing surrounding tennis courts shall be 10' high chain link fence.
- Refer to fencing section for more information
- Wind screening shall be vinyl Coated polyester panels, weather resistant, woven open mesh curtain, weight approximately 7.3 ounces per square yard



FOOTBALL FIELDS

General Information

- Final field sizes and cross sections shall be confirmed during design phase depending on applicable use

03

General Goal Post Specifications

- Goal post upright height shall be 20'
- Crossbar width shall be 23'-4"
- Gooseneck depth shall be 8'
- Goal post shall be aluminum and powder coated Saturn Yellow
- Acceptable product suppliers include
 - Sportsfield Specialties, Inc.
 - Triman Tele-Goal
 - Gilman Gear
 - UCS Sports and Recreation Equipment
 - Or approved equal



General Turf Specifications

- See "Athletic Grass Surfaces"

SOCCER FIELDS

General Information

- Final field sizes and cross sections shall be confirmed during design phase depending on applicable use

General Goal Specifications

- All goals shall meet or exceed NCAA and NFSHSA specifications as well as ASTM safety and performance specifications (F2056 and F2673).
- All moveable goals shall require wheels
 - Each side panel shall require two sets (4 wheels) of semi-pneumatic wheels, preferably built into the base.
 - Owner also prefers a fifth wheel, semi-pneumatic, rotating, positioned on center of backbar base frame. Welded steel bracket that extends behind the goal frame shall hold this wheel.
 - Wheels shall be permanent to shorten set-up time and should not interfere with the look of the goal.
 - Rear wheel shall have a hand tightening locking mechanism
- All goals shall be powder coated white.
- All goals, with the possible exception of the 4 feet by 6 feet, shall be constructed of round material.
- All goals shall require weighted system, minimal exposure, and counter balanced base frames, if available.
- All goals shall require replacement parts (i.e., 1 extra per unit: nets, locking system, hooks, cable).
- Anchoring system included with all moveable goals.
- Netting shall be included.
- Acceptable product suppliers include
 - Keeper Goals
 - KwikGoal
 - Or approved equal



General Turf Specifications

- See "Athletic Grass Surfaces"

BASEBALL AND SOFTBALL

General Information

- Final field sizes and cross sections shall be confirmed during design phase depending on applicable use

General Foul Pole Specifications

- Pole shall be heavy-wall 4-inch OD aluminum pipe, 15 feet high above ground
- Panel shall be 11-gauge, knuckled selvage Chain link panel frames with heavy duty steel supports, 18 inches wide by 7 feet high
- Finish shall be electrostatically powder coated optical yellow
- Acceptable manufacturers include Sportsfield Specialties, C and H Baseball, Mid America Sports Advantage, or approved equal



General Bases and Plates Specifications

- Homeplate shall be Schutt Bury All Rubber Homeplate or approved equal
- Pitching rubber shall be Regulation Hollywood 4 Way Official Size Pitching Plate or approved equal
- Acceptable manufacturers include Beacon Ballfields, Schutt Sports, . Mid America Sports Advantage, Partac Peat or approved equal

General Clay Specifications

- Refer to "Infield Mix" in "Surfaces" Section

General Turf Specifications

- Refer to "Athletic Grass Surfaces" in "Surfaces" Section

Section 04

WATER FEATURES

Splash Pads

04

SPLASH PADS

Design Specifications

04

- Splash equipment shall be designed and manufactured with the most current safety standards and guidelines
- Splash equipment shall meet most current ADA standards and guidelines
- Equipment shall reflect context and aesthetic and be coordinated with other park site furnishings
- Equipment shall be designed for children 2-12 years of age
- Equipment shall be manufactured by "Vortex USA Inc." or approved equal



Section 05

SITE FURNISHINGS

05

Flag Poles
Seating
Picnic Tables
Drinking Fountains and Bottle Fillers
Grills
Trash and Recycling Receptacles
Grills Bicycle Racks
Bollards
Bleachers

FLAGPOLES

Design Specifications

- Flagpole shall be 30' or 40' aluminum pole
- Flagpole shall have an internal halyard system made of high grade spun aluminum and internal revolving truck
- Flagpole finish shall be black anodized
- Footing shall be a minimum of 48" deep and 48" wide with 3000 psi concrete and aluminum flash collar
- Flagpole shall be Model EC40 IH or Model ECA30 IH from "The Flagpole Company" or approved equal
- Installation shall be completed in accordance with manufacturer's specifications



SEATING

Design Specifications - Playground Bench

- Bench shall have backrest without armrests
- Bench seat and back shall be perforated
- Bench shall be in-ground mount
- Bench colors shall be sky blue on the seat and black on the support posts
- Bench shall be manufactured by Gametime, Tuffclad Series product #28008, or approved equal



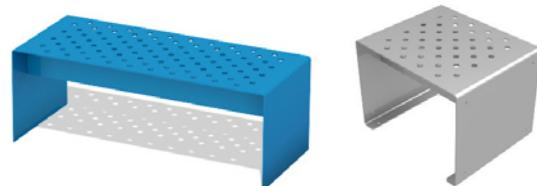
Design Specifications - Park Tables

- All tables shall be surface mounted
- Tables to be constructed of stainless steel table top and aluminum frame. Seats shall be made of aluminum slat and be backless
- Table to be manufactured by Forms+Structures, Tagent Table, or approved equal
- The table to be round, table height, and constructed of stainless steel
- Table to be manufactured by Forms+Structures, Column Table, or approved equal



Design Specifications - Park Seating

- All seating shall be surface mounted
- For seating, use Forms+Structures, Quadra seat made of TENSUL Ultra High Performance Concrete (UHPC), or approved equal
- Or Landscape Forms, Ollie Swivel Seat constructed of steel and aluminum, or approved equal
- Or Game Time, Series 800 made of perforated steel, or approved equal



PICNIC TABLES

Design Specifications

- Picnic table shall be square with fixed seats
- Picnic tabletop and benches shall be perforated
- Picnic tables shall have heavy duty 3/16" thick center support, in-ground mount
- Picnic table shall have 4" square post with 3" square seat supports and 2" square seat braces
- Picnic table must have option to accommodate wheelchair accessibility
- Picnic table colors shall be sky blue on the seat and tabletops, and black on the support posts
- Picnic table shall be manufactured by Gametime, Tuffclad Series product #28021, or approved equal



DRINKING FOUNTAINS AND BOTTLE FILLERS

Design Specifications

- Drinking fountain/bottle fillers casting shall be cold rolled steel with anti-corrosion finish and frost resistant valve
- Basin shall be stainless steel
- Bubbler shall be vandal resistant chrome plated
- Drinking fountain/bottle fillers shall be "Evergreen" color
- Drinking fountain/bottle fillers shall be ADA compliant
- Drinking fountain/bottle fillers shall be manufactured by "Elkay" or approved equal manufacturer



GRILLS

Design Specifications

- Grill shall be permanently installed charcoal grill
- Grill shall have adjustable height grate and rotatable
- Grill shall be rust resistant
- Grill shall be 30" Lx20" Wx10" H
- Grill shall be ULINE product #H-6580, or approved equal



TRASH AND RECYCLING RECEPTACLES

Design Specifications

- Receptacle shall be Plastisol coated punched steel with 16 gauge galvanized steel lid
- Receptacle lid shall have a powder coat finish
- 32 gallon, plastic refuse container
- Picnic table colors shall be sky blue on the receptacle sides and black on the lid
- Picnic table shall be manufactured by Gametime, Tuffclad Series product #28026, or approved equal



BICYCLE RACKS

Design Specifications

- Bicycle racks shall be made out of 10-gauge, galvanized steel or attractive powder coating.
- Bicycle racks colors to be black
- Bicycle racks shall have 2 points for locking frame and wheel.
- Bicycle racks shall be manufactured by Uline, Circle Bicycle Rack product H-6572, or approved equal



BOLLARDS

Design Specifications

- Bollards shall be black in color
- Bollards to be 36 inches in height and 4 1/3" in diameter for the body and base
- Bollards shall be constructed out of steel
- Bollards along trails, access roads, and other areas that require sporadic access by larger vehicles to be locking, collapsible/fold down.
- Bollards shall be manufactured by Reliance Foundry, Model R-702, or approved equal



BLEACHERS

Design Specifications

- Bleachers shall have all aluminum tube and channel understructure
- Bleachers shall have rust resistant angle frame system
- Bleachers shall have 9 gauge galvanized chain link guardrail components
- Bleachers shall have fully closed aisle and decking system
- Bleachers must come with 5 year warranty on the structure
- Bleachers shall be Alum-A-Stand manufactured by Dant Clayton, or approved equal



Section 06

LIGHTING

06

Pedestrian Lighting
Tree Lighting
Security Lighting

PEDESTRIAN LIGHTING

Design Specifications

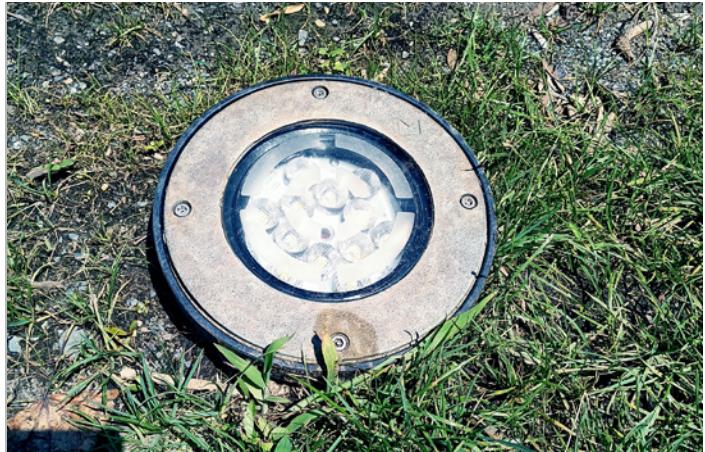
- Light fixture shall be a decorative pole mounted fixture
- Fixture shall have LED driver mounted in fixture base at pole top
- Pole shall be 20 ' high and round with 4.5" in diameter
- Pole shall be aluminum with galvanized anchor bolts
- Both the pole and fixture shall be polyester powder coated silver
- Pole shall be mounted in a pre-cast reinforced concrete base, buried a minimum of 5' depth
- Footing shall have 10' rigid steel conduit entering and leaving
- Light fixture shall be product number "NIC-PT-70LED-40K-RND-120-SIL" by "Intrigue Lighting" or approved equal.
- Pole shall be product number "PA5-S-20-M-4.5" by "Intrigue Lighting" or approved equal.



TREE LIGHTING

Design Specifications

- Tree lighting shall be in ground lighting fixtures
- Light fixture shall rock guard and lens ring to protect against vandalism
- Light fixture shall have 6 LED emitter configuration, electronic driver, anti-siphon barrier on wiring to and from splice, and spot distribution
- Light fixture shall be product number "LTV767SP/6L3K120-RG60" by "Kim Lighting" or approved equal.



SAFETY LIGHTING

Design Specifications

- Light fixture shall be a pole mounted area light
- Light fixture shall be type 4 wide distribution with platinum silver finish
- Light fixture shall include sitesync 7-pin on/off/dim, and daylight sensor 120-480VAC
- Light fixture shall be product number "VPS-36L-65-4K7-4W-UNV-AD-PS-7PR-TL-F-SW7PR+" by "Beacon" or approved equal.
- Pole shall be product number "SSA-B-20-40B-1-B3-PS-VMI" by "Beacon" or approved equal.



Section 07

PLAYGROUNDS

07

Equipment
Surfacing

EQUIPMENT

Design Specifications

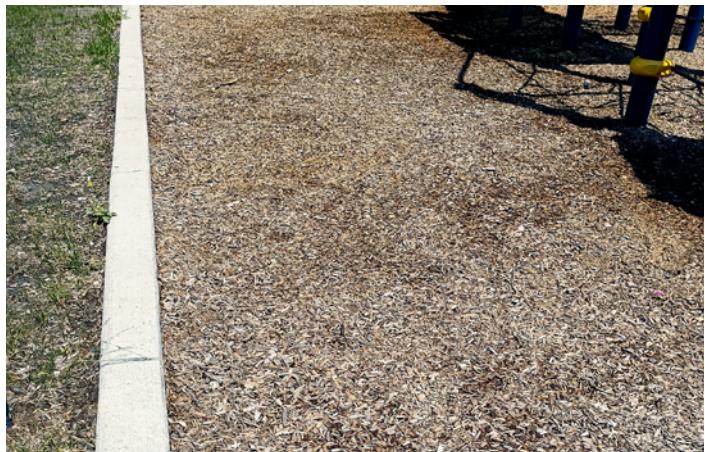
- Playground equipment shall be designed and manufactured with the most current CPSC and ASTM safety standards and guidelines
- Playground equipment shall meet most current ADA standards and guidelines
- Equipment shall reflect context and aesthetic and be coordinated with other park site furnishings
- Equipment shall be designed for children 2-12 years of age
- Equipment shall be manufactured by "Landscape Structures", "Superior Recreation Products", or approved equal.



SURFACING

Design Specifications

- Safety surfacing material shall be engineered wood chips
- Surfacing cross section shall consist of 12" depth of wood chips over 4" pea stone, separated by geotextile separation fabric
- Slotted drainpipe shall be installed for drainage under playground surface area
- Where playground does not abut a concrete surface or wall, a 6"x24" continuous curb shall be installed at playground surface edge



Section 08

STRUCTURES

Shelters

08

SHELTERS

Design Specifications

- Shelters shall be square with hip roof
- Roof shall be 24-gauge exposed fastener metal roofing
- Structure shall have powder coated tube steel frame
- Shelter shall be engineered to local code
- Roof shall be Tahoe Blue
- Facia and soffit shall be Denim semi-gloss
- All siding, trim and doors below the soffit shall be Dorian Gray semi-gloss
- All shelters shall be manufactured by "MRC Recreation", "Poligon" or approved equal



Section 09

FENCING

09

Chain Link
Decorative

CHAIN LINK FENCING

General Information

09

- Fences shall be 42" maximum height at playground/splashpad perimeter fencing and use separation area, 6' maximum height at field perimeters, and 8'-12' maximum height at ball courts.
- Fences shall not hinder access along accessible paths
- Minimum gate opening shall be 4' in horizontal width

Design Specifications

- Posts shall be Schedule 40 standard weight pipe, in accordance with ASTM F1043 and have a minimum steel yield strength 30,000 psi
- Posts shall have a polymer color coating in the color black
- Corner and end posts shall have a nominal size of 3" for fences up to 8' and 4" for fences taller than 8'
- All Fences shall have a top and bottom rail.
- The fabric shall be 9-gauge steel with 2" wire mesh and black polymer coating to match posts
- Post shall be spaced no more than 10' apart



DECORATIVE FENCING

General Information

- Fence shall be a maximum height of 6' and minimum height of 42"
- Decorative fences shall be used to delineate edges of park property and separate uses within the park
- Fences shall not hinder access along accessible paths
- Minimum gate opening shall be 4' in horizontal width
- The fence system shall conform to fully welded ornamental steel design, rackable, extended picket bottom rail treatment, all-terrain weld treatment, standard picket space
- Fence shall be manufactured by Ameristar Fence Products, or approved equal



Design Specifications

- Fence panels and posts shall be steel, and conform to the requirements of ASTM A653/A653M, with a minimum yield strength of 45,000 psi (310 MPa)
- Fence posts shall be a minimum of 2-1/2" square x 12 gauge
- Material for fence pickets shall be 1" square x 14 gauge tubing.
- The rails shall be steel channel, profile, 1.75" x 1.75" x 12 gauge

Section 10

SIGNAGE

10

Gateways
Park Specific Signage

GATEWAYS

General Information

- Gateway signage shall use the standard colors outlined within the City of Troy Wayfinding Standards Manual.
- Gateway signage colors shall be:
 - Blue- Large Field
 - Red- Accent color
 - White- Arial Font for all Park Name lettering
 - Ochre- Accent Color and "Troy, NY" lettering
- Gateway signage shall follow City's Logo toolkit



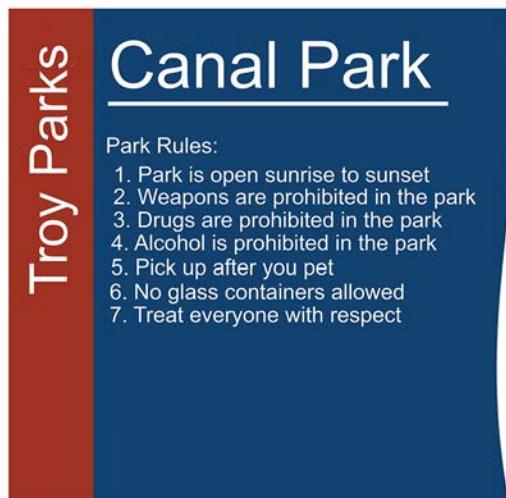
Design Specifications

- Gateway signage shall all be a minimum of 60" x 20".

Park Specific Signage

General Information

- Parks Specific signage shall use these standard colors:
 - Blue- Large Field
 - Red- Banner Field on left side
 - White- Arial Font for all lettering



Design Specifications

- Wayfinding signage shall all be 20 " by 20".



Section 11

DOG PARKS

11

Fencing and Gates
Dog Park Furnishings

FENCING AND GATES

General Information

- All dog parks are to be fenced.
- Fence shall be a minimum of 5' tall. Fence heights will vary site to site based on size of dogs and landscape.
- Minimum gate opening shall be 4' in horizontal width
- Entrance must include clear signage with rules on how to use double gate

11



Design Specifications

- All fence gates into a dog park shall be a double gate system with a minimum of 16 sf of space in between the two gates.
- Dog Fence shall be standard chain link (see Chain Link Fence in Section 9)

DOG PARK FURNISHINGS

General Information

- All dog parks shall have waste stations inside the fenced park
- Dog waste stations to be models that have attached litter bin or receptacle with lid
- Each dog park shall have at least one dog water fountain
- Dog furnishings shall be the same color and match

Design Specifications - Waste Station

- Waste station shall be constructed from commercial grade aluminum and powder coated
- Waste station posts shall be square galvanized posts
- Waste station bin should be 11 gallon or larger
- Waste stations shall come with at least 400 bags and 25 liners
- Dog waste stations shall be manufactured by Terra Bound Solutions, or approved equal

Design Specifications - Water Fountains

- Water fountains shall be constructed from stainless steel with corrosion resistant finish
- Dog water fountains require a 1/2" supply line, and a wasteline which measures a minimum diameter of 1.25"
- Operates on water pressure range of 20-105 psig
- Dog water fountains shall be manufactured by Dog On It Parks, or approved equal



Section 12

Multi-Use Pathways

12

Surfacing
Fencing
Bollards
Maintenance

SURFACING, FENCING, AND BOLLARDS

General Information

- Pathways shall be a minimum of 8' wide and a maximum of 12' wide
- Paths shall have a 10' resting area along long stretches of sloped paths
- Paths should be constructed out of asphalt (See asphalt surfacing in Section 1)
- Bollards or fences should be used at path entrances to keep out vehicles that are not the intended users
- Bollards should follow design standards from this manual (See Bollards section in Section 5)
- Fencing along multi-use pathways shall be wooden split rail fence (see photo to right)



Maintenance

- Pathways should be swept annually with a power broom
- Crack sealing should be done on a bi-annual basis to preserve pavement life

Section 13

TRAILS

13

Clearing
Maintenance

CLEARING

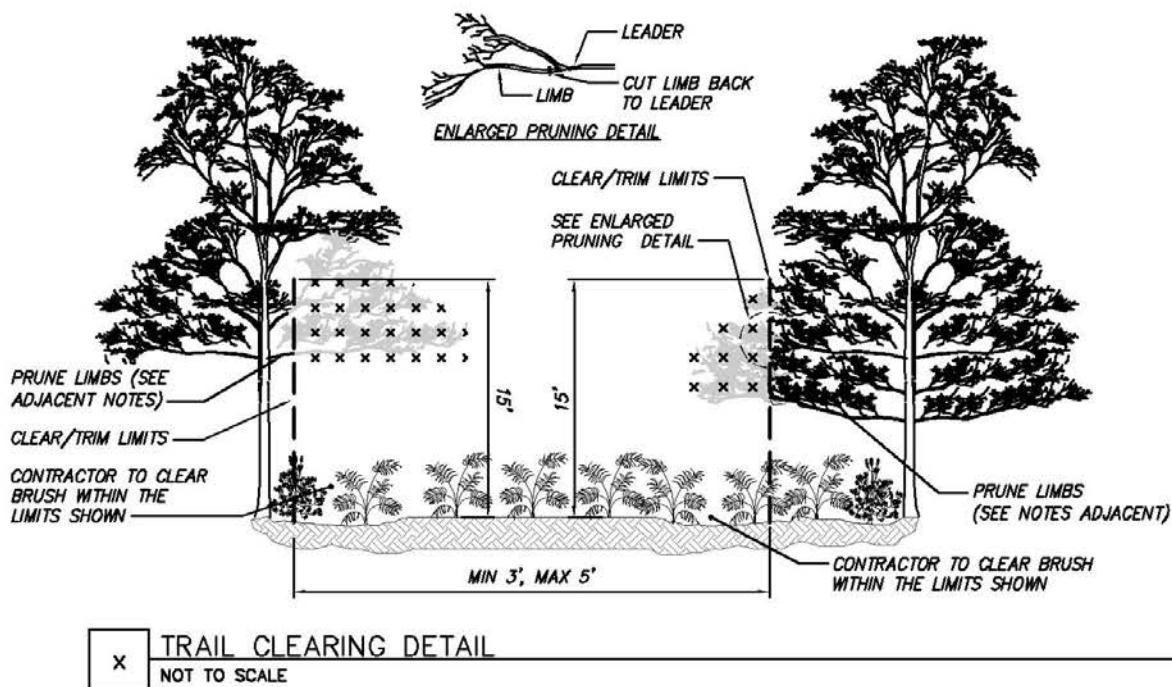
General Information

- Paths shall be a minimum of 3' wide and a maximum of 5' wide

13

Clearing

- Paths should be cleared of trees and brush
- Trails to be cleared/trimmed of all vegetation, brush, branches within 3'-5' horizontal and 15' vertical throughout the length of the trail
- Trees with a diameter of 6" or larger should be left in place but should be pruned back removing any branches within the clear zone.
- All pruning should be done in accordance with ANSI 300 Pruning Standard Part 1
- When trimming limbs, the entire limb should be removed until the leader
- Brush/limbs may be chipped and spread evenly on site a minimum of 5' away from the trail. Wood chips shall not be spread deeper than 4" thick
- Any disturbed area should be seeded and mulched



MAINTENANCE

Maintenance

- Paths should be cleared of trees and brush
- Horizontal clear zones should be maintained on a 3-5 year basis or as needed as encroachment occurs
- Vertical clear zones should be maintained as needed
- Trails that are to be ADA compliant should have bi-monthly maintenance to maintain compliance

13

