NOTE TO CONSULTANTS: Edit with Track Changes turned on, any text in this section that appears in bold and italics then turn off the bold and italics for the final approved version. This specification section also needs to be edited and modified to reflect the specific design layout chosen for your project (Remove this Note).

PART 1 - GENERAL

1.01 Description: Construct the entire Ballfield Infield using specified and approved pre-mixed, imported infield (sand/clay) soil mix with added conditioner. Spread and compact ***4"*** of specified base sand, then spread and compact ***4"*** depth of infield mix. Provide and install Pitcher's Mound, Batter's/ Catcher's boxes, Home Plate, Pitcher's Rubber, Bases and Associated Anchors.

1.02 Quality Assurance:

A. All construction shall be in accordance with the City of Seattle Standard Specifications and Plans (most recent edition) and all other pertinent Seattle Parks & Recreation (SPR) Standard Specifications and Details.

B. Manufacturer's Specifications: Adhere to manufacturer's instructions for product handling, assembly, installation, and maintenance.

1.03 Submittals: For each Product Specified, submit the following for approval prior to delivery:

A. Manufacturer's product data.

B. Manufacturer's installation instructions.

1.04 Related Sections

Section 11 68 33 - Athletic Field Equipment
Section 31 00 00 - Earthwork
Section 32 31 13.33 - Chain Link Backstops & Gates
Section 32 80 00 - Irrigation Systems

1.05 Project Conditions: Underground utilities and site elements: Locate all underground utilities and site elements prior to digging. Take care to neither disturb nor damage any existing above ground or underground utilities or site elements.

PART 2 - PRODUCTS

2.01 Infield Materials:

A. The Base Sand Mix shall meet or exceed the following requirements:

1. Base Sand: Base Sand shall be composed of no less than 99.7% mineral aggregates by dry weight (as measured by organic burn test) meeting the following particle analysis gradation:

Screen Size	% Passing
¼"	100
#4	90-100
#10	80-90
#20	60-80
#30	40-60
#60	<10
#100	<5
#200	<2

2. Base Sand shall be compacted to 90% of maximum dry density as measured by the Modified Proctor test (ASTM D1557) shall exhibit an infiltration rate of a minimum of 9 inches per hour.

B. The Infield Clay/Sand Soil Mix: The Sand/Silt/Clay Infield Soil Mix and the conditioner shall be blended mechanically to a homogeneous state in an approximately, **60%** sand, **20%** silt, and **20%** clay mixture and shall meet or exceed the following requirements:

Size Sieve	Percent Passing
No. 4	100%
No. 20	85-100
No. 50	50-85
No. 100	30-50
No. 200	20-30
No. 270	15-20

1. Sodium Adsorption Ratio (SAR) shall be less than 6.0.
2. The Saturation Extract concentration for Boron shall be less than 1.0
3. The infield soil shall have a pH range of from 5.5 to 7.5.
4. Minimal weed seed shall be present based on germination testing of a representative sample.
5. Non-soil components shall be less than 1% by volume.

C. The Contractor shall submit soil analysis results from soils testing laboratory to the Engineer. Indicate source and obtain the Engineer's approval before hauling to site (an analysis test of a 5 pound bag sample is required).

2.02 The Infield Soil Conditioner: Conditioner shall be as manufactured for the purpose of conditioning baseball and softball infields and is composed of inorganic materials especially manufactured for this purpose. It is available as AXIS "Play Ball" Advanced Formula Infield Soil Conditioner, as manufactured by AGRO-TECH 2000, Inc., or approved equal.

2.03 The Pitcher's Mound: Mound Mix shall be pre-mixed and processed to approximately 50% clay or higher mixture. The clay soil shall be free of rocks and debris. Build the entire mound with this

clay mixture. Landing area and table area: Excavate the landing area and the table of the pitcher's mound and install TURFACE MOUNDMASTER® Blocks or Professional Mound Clay®, or approved equal, per the manufacturer's specifications.

2.04 The Batter's Boxes and Catcher's Box: The batter's and catcher's boxes shall be constructed with high quality clay such as MOUNDMASTER® blocks or Professional Mound Clay® from PROFILE Products, or approved equal. MOUNDMASTER® blocks should be installed one layer deep and the Professional Mound Clay® should be installed to a depth of 4" to 6", per manufacturer's specifications.

2.05 Home Plate, Bases, Pitcher's Rubbers and Anchors:

A. Home Plate, Bases, Pitcher's Rubbers and Anchors shall be one of the following choices:

1. Home plates shall be Schutt Universal Home Plate #12807300, all rubber, complete with removable stanchions, female ground anchors, and rubber plugs, or approved equal. Provide (1) home plate and (1) additional spare home plate for each field.

2. Bases (break-a-way) shall be Bolco Major League #175-MLB, one piece, all rubber construction with universal stanchion, or approved equal. Base Anchors shall be Bolco #227-FAS, or approved equal. Provide one (1) base and anchor for each base location.

(or)

2. Bases (non-break-a-way) shall be Hollywood Pro Impact/Compression Pro, one piece, all rubber construction with universal stanchion, or approved equal. Base Anchors shall be Hollywood CH Standard-duty (1-1/2"), or approved equal. Provide one (1) base and anchor for each base location.

3. Pitcher's Rubbers shall be 24"x6" Hollywood Removable Rubber, dual stanchion, or approved equal. Provide (1) rubber and (1) additional spare rubber for each field.

4. Ground Anchors and Plugs shall be provided for each base and pitcher's rubber location. Note: Baseball/Softball fields may have multiple layouts on each field as follows:

a. Baseball/softball field base layouts may be located at 60', 65', 70' or 90', see Layout Plans.

b. Pitcher's rubber layouts may be located at 44', 46', 48' or 60'-6" from home plate, see Layout Plans.

PART 3 - EXECUTION

3.01 Preparation of Infield: Remove existing infield soil and base materials to a total depth of 8". Load, haul and dispose of existing materials in an approved manner.

3.02 Placement of Base Sand Mix and Infield Soil Mix:

A. Place a minimum 4" of base sand mix and 4" of infield soil mix in individual lifts over the entire infield area. Compact the entire infield area to 90% density by mechanically dragging

and rolling, as required. The infield shall be graded slightly following the established grades of the entire ballfield area, or as shown on the grading plan, to allow drainage off of the infield surface.

B. Meet existing surfaces and grades of the surrounding areas. The finished infield surface shall be true to the existing grades or grades as shown on the plans with no bumps, ridges, potholes, or gullies. Match grades flush with the top of the concrete mow strips and slabs located under backstops, wing fences and dugouts if they exist.

3.03 On-site mixing of Infield Soil Mix and Soil Conditioner shall be amended at a rate of **10% (by volume)** of the soil conditioner to infield soil. Evenly spread over the entire infield area a total of **5 tons** of the soil conditioner, per manufacturer's recommendations. Evenly till the soil conditioner into the top **3"** of infield soil. Roll and drag the entire infield area per manufacturer's recommendations.

3.04 Install pitcher's rubber, base anchors and home plate area per manufacturer's recommendations and industry and SPR standards. Exact locations for home plate, bases and pitcher's rubber shall be as directed by the Engineer in the field. The Engineer shall also give direction in the field for the construction of the pitcher's mound and batter's box areas.

3.05 Cleanup: Remove all metal, wood, and concrete debris, protective wrappings and coverings, and shipping materials from the project site. Remove all residues, repair all stains, scuffs, abrasions, and marks from the finished product prior to requesting inspection.

END OF SECTION