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April 6, 2022

Mr. Jason Waldron
Director of Facilities
Manchester-Essex Regional School District
36 Lincoln Street
Manchester-by-the-Sea, MA 01944

Re: Evaluation of Impact Attenuation Properties of Playing Surfaces
Manchester-Essex Regional School District
36 Lincoln Street
Manchester-by-the-Sea, MA 01944
Gale JN 718111

Dear Mr. Waldron:

Gale Associates, Inc. (Gale) was engaged by the Manchester-Essex Regional School District (MERSD) to perform an evaluation of two synthetic turf fields, Brook Street Field and Joseph M. Hyland Field, both located in Manchester-by-the-Sea. The purpose of the evaluation was to:

- Perform visual observations to assess the surface condition of the synthetic turf field.
- Perform GMax testing using methods conforming to *ASTM F355A/F1936 – Standard Specification for Impact Attenuation of Turf Playing Systems as Measured in the Field.*
- Prepare a letter report with observations, test results and opinions for repairs and/or replacement.

On Friday, March 25, 2022, Gale representatives met with Mr. Jason Waldron, Director of Facilities, at the synthetic turf fields. Gale performed visual observations of the prevailing synthetic turf surface conditions and performed GMax testing at ten (10) locations at each field (refer to Attachments 1 & 2). According to MERSD, the Brook Street Field is used for Freshman and JV sports during the week, which include football, men and women's soccer, men and women's lacrosse, and field hockey. Brook Street Field is also used for various youth sports on the weekends. Joseph M. Hyland Field is used for JV and Varsity sports, which include football, men and women's soccer, men and women's lacrosse, and field hockey. Joseph M. Hyland Field is also used by students throughout the school day during recess and lunch periods.

OBSERVATIONS

Brook Street Field

1. According to MERSD, the synthetic turf field is approximately fifteen (15) years old (completed in 2007). It is our understanding that the synthetic turf system was manufactured by FieldTurf and is comprised of a two-and-a-quarter inch (2.25") monofilament system with sand/crumb rubber granules serving as the infill. There is no shock pad.

2. The turf fibers were noticeably degraded. Fiber layover was observed throughout the field and accumulations of loose fibers were visible.

3. The infill depth appeared low throughout the field.

4. Inlaid striping lines and seams were generally in fair condition throughout the field. The seams along the football sidelines, though partially visible and raised, appear to remain intact.

5. Several "heaves" and "depressions" in the field were observed in the goal areas. These variations have the potential to affect a ball roll or create a trip hazard.

6. Water ponding was observed on the nearby walkway and on the turf at the entrance to the field.

7. The soft soil side slope behind the southwestern goal has eroded onto the turf, resulting in a layer of caked mud on the turf behind the goal.

Joseph M. Hyland Field

1. According to MERSD, the synthetic turf field is approximately twelve (12) years old (completed in 2010). It is our understanding that the synthetic turf system was manufactured by FieldTurf and is comprised of a two-inch (2.0") monofilament fiber system with sand/crumb rubber granules serving as the infill. There is no shock pad.

2. Turf fibers were noticeably degraded. Fiber length was found to be in consistent with the field age, but large accumulations of loose fibers were found throughout the turf field, indicating that the carpet binder is failing and no longer holding turf fibers. This has resulted in bare spots and insufficient cover.

3. Several turf seams, particularly along the football ten-yard lines, were either bare or appeared to be coming apart. The bare spots were found throughout the field have the potential to be trip and fall or slip hazards.

4. The infill depth appeared low throughout the field.

5. Several synthetic turf repair patches were observed across the field.

EVALUATION OF IMPACT ATTENUATION PROPERTIES OF PLAYING SURFACE

GMax testing measures a playing surface's ability for shock-attenuation (the amount of force the surface can absorb). The higher the GMax value, the less impact is absorbed by the surface and the greater the risk for athlete injury. The maximum allowable GMax value for a playing surface should be less than 200, as defined by ASTM 1936. The Synthetic Turf Council's (STC) *Suggested Guidelines for the Essential Elements of Synthetic Turf Systems* recommends GMax test results to be lower than 165 throughout the life of the field.

Synthetic turf field surfaces were evaluated using a portable GMax testing device, using methods conforming to *ASTM F355A/F1936 – Standard Specification for Impact Attenuation of Turf Playing Systems as Measured in the Field* (Attachment 1).

GMax values are determined by dropping a 20 pound cylindrical missile at ten (10) locations, as prescribed by ASTM. At each test location, the missile is dropped three (3) times, and the GMax value calculated by disregarding the first drop and then averaging the values from the second and third drops.

Brook Street Field

Gale was informed that, on Tuesday, March 22, 2022, FieldTurf (manufacturer) performed maintenance services on the Brook Street Field, including deep tine grooming, top-dressing with additional crumb rubber infill, and field-wide infill redistribution. The GMax testing and field evaluation were performed by Gale on Friday, March 25, 2022. The synthetic turf field had an average GMax of 176. Two (2) out of ten (10) locations tested higher than 200 (ASTM maximum value). These locations were in front of the soccer goals. Seven (7) out of ten (10) test locations had GMax values over 165 (STC recommended maximum value). The synthetic turf field was field measured by Gale to have an average infill depth of 29 mm (1.15"), which is less than the typical 44 mm (1.75") infill depth at the time of installation for a 2.25" turf fiber system. Having less infill than required may result in fiber layover (fibers fall over to a horizontal orientation), which can be associated with accelerated fiber degradation. Please refer to Attachments 1 and 3 of this report for the GMax testing results and evaluation findings.

If the reported average GMax value of one or more test locations is equal or greater than 200, the ASTM F1936 specification recommends that field use should be limited or suspended until the turf playing system can be repaired sufficiently to meet the standard.

Joseph M. Hyland Field

Gale was informed that, on Monday, March 14, 2022, FieldTurf (manufacturer) performed maintenance services on Joseph M. Hyland Field, including deep tine grooming, top-dressing with additional crumb rubber infill, and field-wide infill redistribution, and limited patch

repairs. GMax testing and field evaluation were performed by Gale on Friday, March 25, 2022. The synthetic turf field had an average GMax value of 163. All ten (10) locations tested less than 200 (ASTM maximum value). Five (5) out of ten (10) test locations had GMax values over 165 (STC recommended maximum value). The synthetic turf field was field measured by Gale to have an average infill depth of 22 mm (0.87"), which is less than the typical 38 mm (1.5") infill depth at the time of installation for a 2.0" high turf fiber system. Having less infill than required may result in fiber layover (fibers fall over to a horizontal orientation), which can be associated with accelerated fiber degradation. Please refer to Attachments 2 and 4 of this report for the GMax testing results and evaluation findings.

PRELIMINARY REPAIR CONSIDERATIONS: BROOK STREET FIELD

Based on the extent of fiber loss and advanced degradation, the existing turf carpet may no longer be able to retain the amount of infill necessary to achieve GMax values less than 200. As a result of the identified observations, it is Gale's opinion that the following repair/renovation options can be considered:

Replacement of an approximately ten by ten (10 x 10) yard section of synthetic turf at each goal area, extending from the goal line to the front of the end zone.

- Remove and dispose of the existing synthetic turf surface section (carpet and infill).
- Prepare base stone to receive a synthetic turf surface.
- Install new 2.25" monofilament synthetic turf, and crumb rubber (SBR) and sand infill.
- Perform GMax and infill depth testing at installation and annually.

This repair option is an attempt to obtain GMax values in the two goal areas to be less than 200. It should be noted that this option will not address continued turf degradation, infill depth reduction, and associated GMax value increases across the remainder of the field. It is Gale's opinion that this option be considered a short-term repair, which can provide MERSD a limited window of additional field use prior to full turf replacement, as described in the "Replacement Options/Considerations" section below.

The preliminary cost estimate for this option ranges from $20,000.00 to $30,000.00.

PRELIMINARY REPAIR CONSIDERATIONS: JOSEPH M. HYLAND FIELD

Based on the extent of fiber loss and advanced degradation, the existing turf carpet may no longer be able to retain the amount of infill necessary to achieve GMax values less than 200. Additionally, numerous areas of seam separation present additional concerns. As a result of the identified observations, Gale recommends the following repair/renovation options:

Selective synthetic turf patch repair by a qualified turf installer along separated seams and areas of full fiber loss. Refer to Attachment 5 of this report for a graphic representation of prospective areas of repair.

- Cut, remove, and dispose of the existing synthetic turf surface to be patched (carpet and infill).
- Compact and prepare base stone to receive a synthetic turf surface.
- Install new 2.0" monofilament fiber synthetic turf, and SBR rubber and sand infill.

This repair option is an attempt to selectively patch and repair locations of seam separation and fiber loss. It is Gale's opinion that this option be considered a short-term repair, providing MERSD a limited window of additional field use prior to full replacement, as described in the "Replacement Options/Considerations" section below. Based on the areas depicted in Attachment 5, Gale has estimated the quantity of required patch repairs to be 1,250 linear feet.

The preliminary cost estimate for this option is approximately $13,000.00.

REPLACEMENT OPTIONS/CONSIDERATIONS (APPLICABLE TO BOTH FIELDS)

Full replacement of the synthetic turf surface by a qualified installer.

- Remove and dispose of the existing synthetic turf surface (carpet and infill).
- Infiltration test, laser grade, and prepare base stone to receive a synthetic turf surface.
- Install new monofilament synthetic turf, and crumb rubber (SBR) and sand infill (shock pad optional with SBR and sand infill).
- Perform GMax and infill depth testing at installation and annually.

This option would result in a new synthetic turf system with a manufacturer's warranty. MERSD may consider installing a shock pad under the synthetic turf system as part of the replacement. A shock pad would improve impact attenuation, potentially over a longer time period. Some shock pad manufacturers offer warranties of sixteen (16) years or more, and therefore could be used over two (2) synthetic turf life cycles. Due to the observed turf degradation, select seam separation, and an anticipated decrease in impact attenuation, it is Gale's opinion that this option be considered for implementation as soon as feasible for both fields.

The preliminary cost estimate for this option ranges from $490,000.00 to $550,000.00 per field. Including a shock pad would add between $85,000.00 and $95,000.00 to this cost for each field. The estimate is for materials and installation only. It does not include additional "soft" costs, such as engineering design services, associated with the project, as well as improvements to the athletic site that may be considered by MERSD.

PROJECT PARAMETERS AND LIMITATIONS

- Test results vary, depending on ground and ambient temperatures, as well as moisture content of the playing surface tested.

- The findings from the playing surface evaluation are based on "in-situ" test methods performed on the day of testing. The test results do not imply that impact-related injuries will not occur even after a playing surface is found to comply with ASTM performance standards.

- The ASTM test methods used do not purport to address all safety concerns, if any, that may be associated with the playing surface being evaluated. It is the Owner's responsibility to establish appropriate safety practices prior to using their playing surfaces.

Thank you for the opportunity to assist Manchester-Essex Regional School District with this project. If you have additional questions or would like to discuss the next steps in renovating/repairing the fields, please do not hesitate to contact the undersigned.

Respectfully submitted,

Bree Sullivan

Bree Sullivan, P.E.
Chief Civil Engineer

Matthew Kinlin

Matthew Kinlin, E.I.T.
Senior Civil Engineer

BDS/MSK/KFR/cmh

Attachments:
- Attachment 1 - GMax Testing Report – Brook Street Field
- Attachment 2 - GMax Testing Report – Joseph M. Hyland Field
- Attachment 3 - Field Evaluation Form – Brook Street Field
- Attachment 4 - Field Evaluation Form – Joseph M. Hyland Field
- Attachment 5 - Joseph M. Hyland Field Areas of Concern

ATTACHMENT 1:
GMAX TESTING REPORT
BROOK STREET FIELD

Impact Evaluation of Playing Surface Using GMax Method- ASTMF335A/F1936

Project Name	Evaluation of Brook Street and Hyland Fields GMax Performance Testing Evaluation
Gale JN	718111
Client	Manchester Essex Regional School District 36 Lincoln Street Manchester-By-The-Sea, MA 01944
Site	Brook Street Field 42 Brook Street Manchester-By-The-Sea, MA 01944
Test Date	Friday, March 25, 2022
Testing by	KFR, MSK
Report Date	Tuesday, April 5, 2022
Report by	MSK

General Information

Field Install Date	2007	**Infill System**	SBR & Sand
Field Orientation	End A = Southwest	**Primary Sport(s)**	FB/FH/SCR/LAX
Underlayment	N/A	**Air Temp**	45° F
Turf Fiber Height	2.25"	**Weather Conditions**	Cloudy
Humidity	90%	**Wind Speed (mph)**	0-5 mph
Notes: Testing was performed in accordance with ASTM F1936 Standard. Equipment used was ASTM 1936 Apparatus with TRIAX 2010 Data Acquisition.			

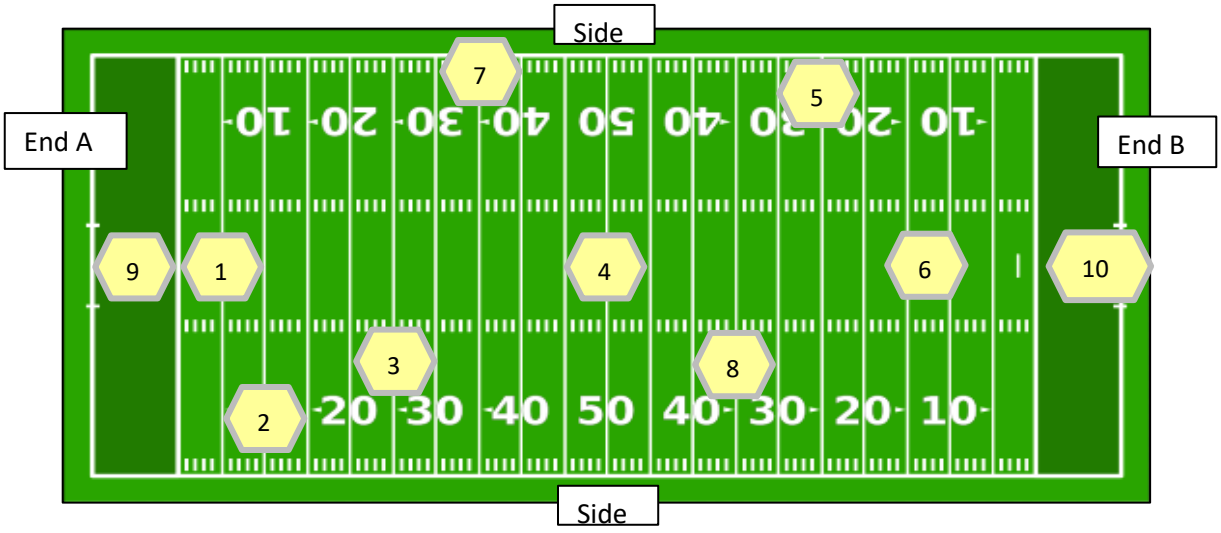
Testing Results Summary

	Average	Per ASTM Specifications	Per STC guidelines
Gmax	176	200 max	165 max
Infill Depth (mm)	29	N/A	± 44

The synthetic turf field recorded an average GMax of 176, with all but two location testing below the ASTM maximum limits of <200. Although not a requirement, per the Synthetic Turf Council's (STC) "Suggested Guidelines for the Essential Elements of Synthetic Turf Systems," the GMax should be below 165 throughout the life of the field. Three test locations recorded GMax values below the 165 limit as suggested by the STC guidelines. The synthetic turf field recorded an average infill depth of 29 mm (1.15"), which is below the ± 44 mm (± 1.75") recommended infill depth at time of installation, as is typical per turf manufacturer's guidelines for a 2.25" turf system. Having less infill may result in fiber layover, as was observed at the time of evaluation.

Testing Location Map (Aerial google photo)

Testing Location Map (Per ASTM Specifications)



Impact Evaluation of Playing Surface
Using GMax Method- ASTMF335A/F1936

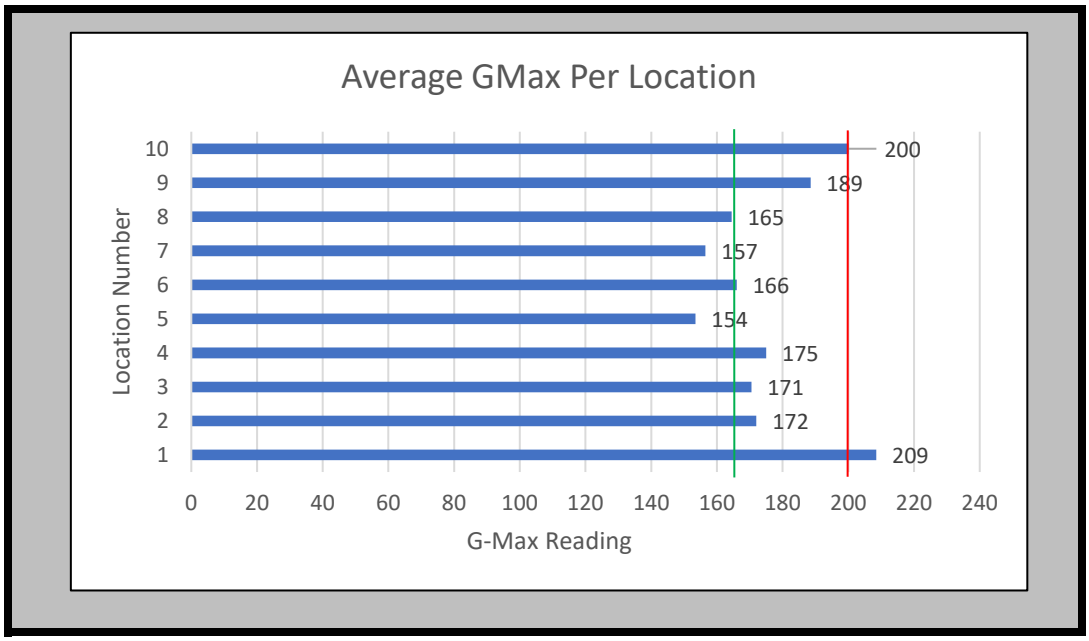
Testing performed using a portable GMax testing device in accordance with *ASTM F355A/F1936 - Standard Specification for Impact Attentuation of Turf Playing Systems as measured in the Field.*

Location #	Drop #	Gmax (g's)	H.I.C	Location Description	Gmax Avg (g's)	Infill Depth (mm)	HIC Avg (HIC)	Surface Temp (°F)
1.00	1.00	184	627	Refer to Testing Location Map	**209**	27	757	61
	2.00	207	751					
	3.00	210	763					
2.00	1.00	154	506	Refer to Testing Location Map	**172**	30	593	62
	2.00	169	581					
	3.00	175	605					
3.00	1.00	150	480	Refer to Testing Location Map	**171**	31	589	65
	2.00	168	578					
	3.00	173	599					
4.00	1.00	162	536	Refer to Testing Location Map	**175**	27	600	66
	2.00	174	601					
	3.00	176	599					
5.00	1.00	136	418	Refer to Testing Location Map	**154**	33	506	74
	2.00	151	494					
	3.00	156	517					
6.00	1.00	157	521	Refer to Testing Location Map	**166**	29	564	67
	2.00	164	553					
	3.00	168	575					
7.00	1.00	140	443	Refer to Testing Location Map	**157**	33	529	75
	2.00	154	519					
	3.00	159	538					
8.00	1.00	147	467	Refer to Testing Location Map	**165**	30	554	68
	2.00	161	538					
	3.00	168	570					
9.00	1.00	175	589	Refer to Testing Location Map	**189**	27	662	64
	2.00	187	652					
	3.00	190	671					
10.00	1.00	180	610	Refer to Testing Location Map	**200**	26	716	68
	2.00	197	702					
	3.00	203	730					
				Average	**176**	**29**	**607**	**n/a**
				Max per ASTM	< 200 [1]	n/a	n/a [2]	n/a

[1] *Per ASTM F355A/1936, 1st drop is disregarded and average Gmax is calculated from 2nd and 3rd drops.*

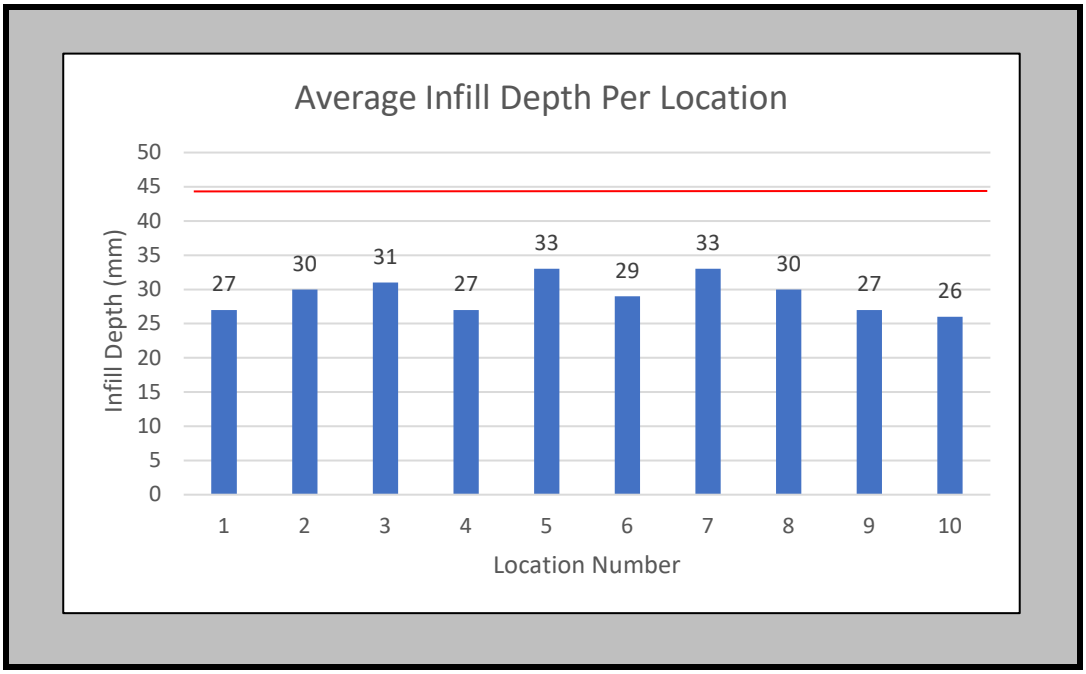
[2] *HIC test value shown utilizes a cylindrical missile and is included as a reference to account for impact duration only. It is not a requirement of the ASTM F1936 and does not correlate with ASTM F335E HIC test values which use a hemispherical missile.*

Results Graphs



*Per ASTM F1936 Specification, the average Gmax shall be less than **200**. If the turf playing system is tested in accordance with this specification, and the reported average Gmax of one or more test points is equal or greater than **200**, the turf playing system should be brought into compliance and field use should be limited or suspended until rectified.

*Although not a requirement, per the Synthetic Turf Council's (STC) Suggested Guidelines for the Essential Elements of Synthetic Turf Systems, Gmax should be below **165** throughout the life of the field.



*Per turf manufacturer's typical guidelines for a 2.25" turf system, the recommended infill depth at time of installation is **±44 mm** (1.75").

Project Photos - Page 1

Photo #1 - 	**Photo #2 -** 
Loose Fibers and degraded turf carpet.	Ponding on turf from walkway runoff.
Photo #3 - 	**Photo #4 -** 
Loose fence posts at turf curb.	Degraded & short turf unable to maintain infill depth.

Project Photos - Page 2

Photo #5 - 	**Photo #6 -** 
Washout onto turf; soil covering turf.	Loose infill where turf is too short to accommodate.
Photo #7 - 	**Photo #8 -** 
Loose infill where turf is too short to accommodate.	Loose infill where turf is too short to accommodate.

- Test results will vary, depending on ground and ambient temperatures, along with the moisture content of the playing surface tested.

-The findings from the playing surface evaluations are based on in situ test methods performed on the given day of testing. The test results do not imply that an impact related injury cannot occur even after a playing surface is found to comply with GMax ASTM performance standards.

-The ASTM methods used do not purport to address all of the safety concerns, if any, that may be associated with the playing surface being evaluated. It is the Owner's responsibility to establish appropriate safety practices prior to using their playing surfaces.

ATTACHMENT 2:
GMAX TESTING REPORT
JOSEPH M. HYLAND FIELD

Impact Evaluation of Playing Surface Using GMax Method- ASTMF335A/F1936

Project Name	Evaluation of Brook Street and Hyland Fields GMax Performance Testing Evaluation
Gale JN	718111
Client	Manchester Essex Regional School District 36 Lincoln Street Manchester-By-The-Sea, MA 01944
Site	Joseph M. Hyland Athletic Field 36 Lincoln Street Manchester-By-The-Sea, MA 01944
Test Date	Friday, March 25, 2022
Testing by	KFR, MSK
Report Date	Tuesday, April 5, 2022
Report by	MSK

General Information

Field Install Date	2010	**Infill System**	SBR & Sand
Field Orientation	End A = North	**Primary Sport(s)**	FB/FH/SCR/LAX
Underlayment	N/A	**Air Temp**	50° F
Turf Fiber Height	2.0"	**Weather Conditions**	Partly Cloudy
Humidity	90%	**Wind Speed (mph)**	5-10 mph

Notes: Testing was performed in accordance with ASTM F1936 Standard. Equipment used was ASTM 1936 Apparatus with TRIAX 2010 Data Acquisition.

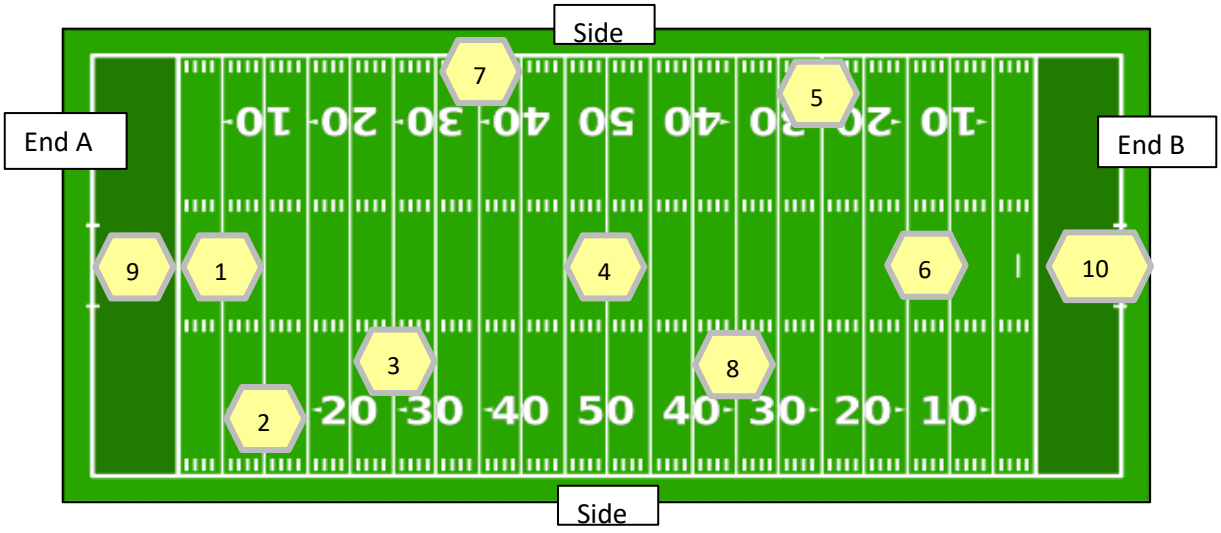
Testing Results Summary

	Average	Per ASTM Specifications	Per STC guidelines
Gmax	163	200 max	165 max
Infill Depth (mm)	22	N/A	± 38

The synthetic turf field recorded an average GMax of 163, with none of the ten locations testing above the ASTM maximum limits of <200. Although not a requirement, per the Synthetic Turf Council's (STC) "Suggested Guidelines for the Essential Elements of Synthetic Turf Systems," the GMax should be below 165 throughout the life of the field. Five test locations recorded GMax values below the 165 limit as suggested by the STC guidelines. The synthetic turf field recorded an average infill depth of 22 mm (0.87"), which is below the ± 38 mm (± 1.5") recommended infill depth at time of installation, as is typical per turf manufacturer's guidelines for a 2.0" turf system. Having less infill may result in fiber layover, as was observed at the time of evaluation.

Testing Location Map (Aerial Google Photo)

Testing Location Map (Per ASTM Specifications)



Impact Evaluation of Playing Surface
Using GMax Method- ASTMF335A/F1936

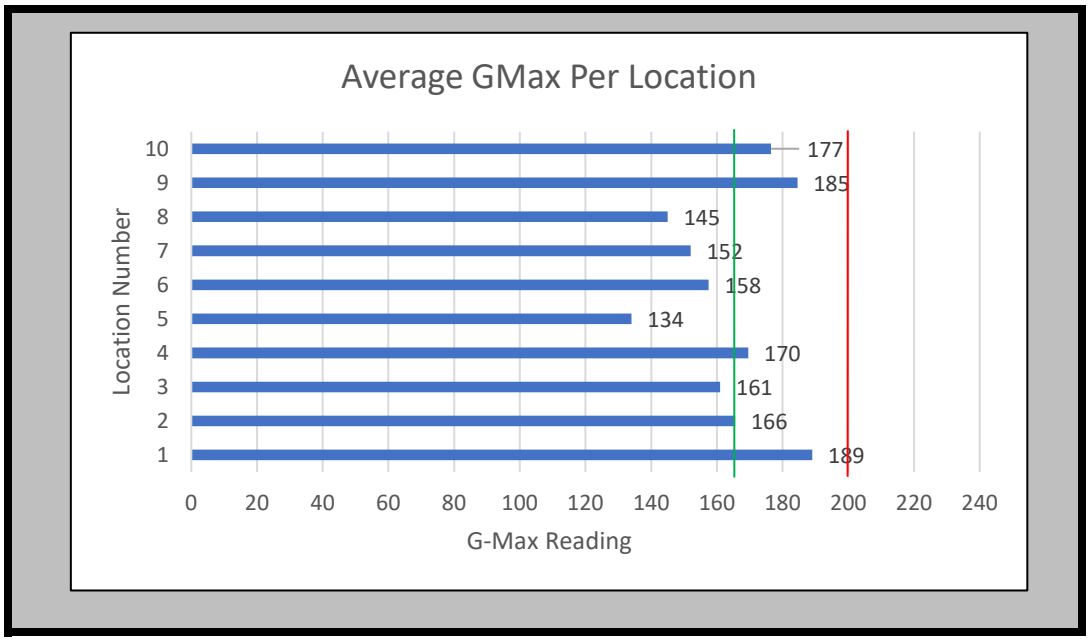
Testing performed using a portable GMax testing device in accordance with *ASTM F355A/F1936 - Standard Specification for Impact Attentuation of Turf Playing Systems as measured in the Field.*

Location #	Drop #	Gmax (g's)	H.I.C	Location Description	Gmax Avg (g's)	Infill Depth (mm)	HIC Avg (HIC)	Surface Temp (°F)
1.00	1.00	176	605	Refer to Testing Location Map	**189**	19	673	96.00
	2.00	188	665					
	3.00	190	680					
2.00	1.00	148	481	Refer to Testing Location Map	**166**	23	566	96.00
	2.00	164	557					
	3.00	167	574					
3.00	1.00	146	460	Refer to Testing Location Map	**161**	22	538	98.00
	2.00	158	523					
	3.00	164	552					
4.00	1.00	148	465	Refer to Testing Location Map	**170**	23	573	72.00
	2.00	168	568					
	3.00	171	577					
5.00	1.00	116	326	Refer to Testing Location Map	**134**	25	406	103.00
	2.00	133	403					
	3.00	135	409					
6.00	1.00	135	393	Refer to Testing Location Map	**158**	21	499	76.00
	2.00	156	497					
	3.00	159	501					
7.00	1.00	130	389	Refer to Testing Location Map	**152**	23	498	97.00
	2.00	151	498					
	3.00	153	498					
8.00	1.00	125	362	Refer to Testing Location Map	**145**	25	454	74.00
	2.00	140	430					
	3.00	150	477					
9.00	1.00	164	538	Refer to Testing Location Map	**185**	19	631	96.00
	2.00	185	640					
	3.00	184	621					
10.00	1.00	153	486	Refer to Testing Location Map	**177**	20	608	73.00
	2.00	172	586					
	3.00	181	630					
				Average	**163**	**22**	**544**	**n/a**
				Max per ASTM	< 200 [1]	n/a	n/a [2]	n/a

[1] *Per ASTM F355A/1936, 1st drop is disregarded and average Gmax is calculated from 2nd and 3rd drops.*

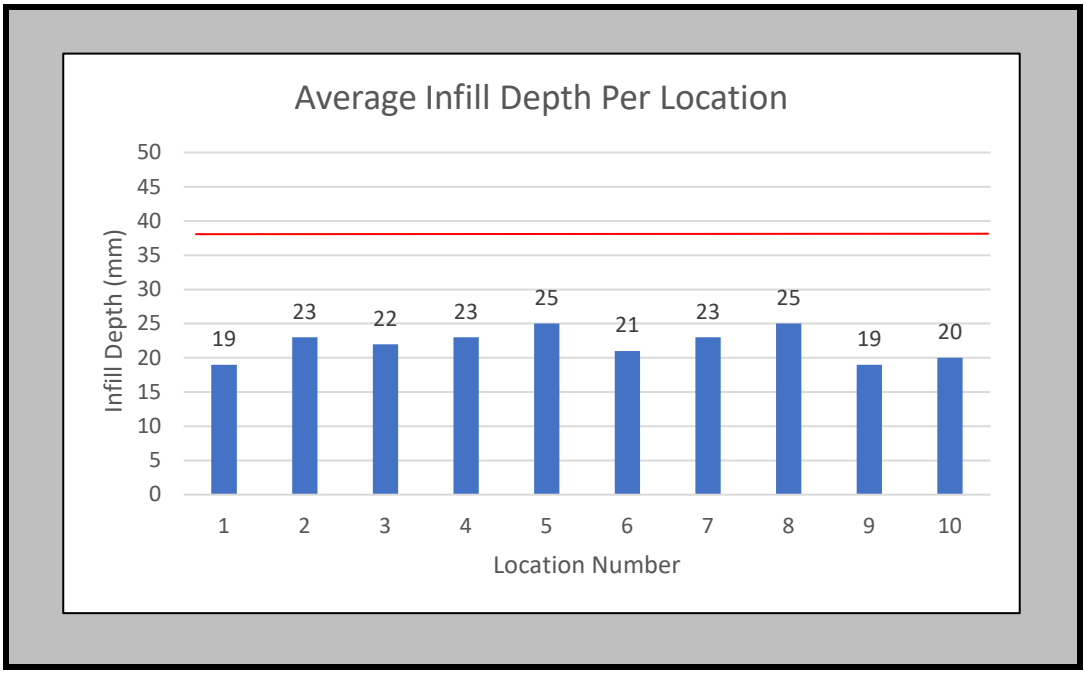
[2] *HIC test value shown utilizes a cylindrical missile and is included as a reference to account for impact duration only. It is not a requirement of the ASTM F1936 and does not correlate with ASTM F335E HIC test values which use a hemispherical missile.*

Results Graphs



*Per ASTM F1936 Specification, the average Gmax shall be less than **200**. If the turf playing system is tested in accordance with this specification, and the reported average Gmax of one or more test points is equal or greater than **200**, the turf playing system should be brought into compliance and field use should be limited or suspended until rectified.

*Although not a requirement, per the Synthetic Turf Council's (STC) Suggested Guidelines for the Essential Elements of Synthetic Turf Systems, Gmax should be below **165** throughout the life of the field.



*Per turf manufacturer's typical guidelines for a 2.0" turf system, the recommended infill depth at time of installation is **±38 mm** (1.5").

Project Photos

Photo #1 -	Photo #2 -
	
Bare spots along tufted lines in turf.	Separated seams along tufted lines.
Photo #3 -	**Photo #4 -**
	
Bare spots along seams, repair patches.	Loose fibers, rapid degradation of turf.

- Test results will vary depending on ground and ambient temperatures, along with the moisture content of the playing surface tested.

-The findings from the playing surface evaluations are based on in situ test methods performed on the given day of testing. The test results do not imply that an impact related injury cannot occur even after a playing surface is found to comply with GMax ASTM performance standards.

-The ASTM methods used do not purport to address all of the safety concerns, if any that may be associated with the playing surface being evaluated. It is the owner's responsibility to establish appropriate safety practices prior to using their playing surfaces.

ATTACHMENT 3:
FIELD EVALUATION FORM
BROOK STREET FIELD

Athletic Field Evaluation Form

Manchester-Essex - Brook Street Field

Field Grade:	2.5

Date of Evaluation	3/25/2022		
Type of Field:	Multi-Purpose Rectangular (MPR)		
Number of Fields:	1		
Typical Age of Users:	Youth, Freshman and JV Sports		
MPR Field Dimensions:	Length:	Width	Run-Out
	390'	220'	

	N/A	Poor (1)	Fair (2)	Good (3)	Excellent (4)
Geometry					X
Stand of Turf		X			
Planarity (playing surface - lack of dips, heaves, holes, etc.)			X		
Striping (completeness, visibility, condition)				X	
Fencing (perimeter fencing, gates, etc.)			X		
Irrigation (condition, coverage, reported adequacy)	X				
Safety (run-outs, lack of obstructions, etc.).				X	
Support Equipment (goals, players benches, etc.)				X	
Athletic Lighting (reported adequacy, lack of spill/glare, general condition, etc.)	X				
Site Lighting	X				
Spectator Seating (condition, size, accessibility, etc.)	X				
Drainage			X		

Average Score = **2.5**

Comments
1. There are heaves and dips in field around soccer goal lines.
2. There are visible, non-planar seams along football sidelines.
3. The walkway has ponding that overflows onto the field and causes ponding on the turf at the entrance.
4. Chain link fence is in good condition, but is loose at turf curb. This causes the fence to be unstable (moves back & forth).
5. Piles of fibers found on field. Fiber length is very short, resulting in reduced infill depth.
6. With a perfect average score being 4, the recorded average score 2.5 indicates an overall facility in fair to good condition.
7. Stand of turf, planarity, fencing, and drainage conditions were rated fair or poor, reducing the average score.

ATTACHMENT 4:
FIELD EVALUATION FORM
JOSEPH M. HYLAND FIELD

Athletic Field Evaluation Form

Manchester-Essex - Joseph M. Hyland Field

Field Grade:	3.1

Date of Evaluation	3/25/2022		
Type of Field:	Multi-Purpose Rectangular (MPR)		
Number of Fields:	1		
Typical Age of Users:	Youth, Freshman and JV Sports		
MPR Field Dimensions:	Length:	Width	Run-Out
	393'	217'	

	N/A	Poor (1)	Fair (2)	Good (3)	Excellent (4)
Geometry					X
Stand of Turf		X			
Planarity (playing surface - lack of dips, heaves, holes, etc.)		X			
Striping (completeness, visibility, condition)			X		
Fencing (perimeter fencing, gates, etc.)					X
Irrigation (condition, coverage, reported adequacy)	X				
Safety (run-outs, lack of obstructions, etc.).				X	
Support Equipment (goals, players benches, etc.)				X	
Athletic Lighting (reported adequacy, lack of spill/glare, general condition, etc.)					X
Site Lighting					X
Spectator Seating (condition, size, accessibility, etc.)					X
Drainage					X

Average Score = **3.1**

Comments
1. Multiple bare spots observed, particularly along tufted lines.
2. Significant seam separation observed, particularly along tufted lines.
3. Accumulated loose fibers observed, indicating ongoing turf degradation.
4. With a perfect average score being 4, the recorded average score of 3.1 indicates an overall facility in good condition.
5. Note the stand of turf and planarity were both rated as poor, reducing the average score.

ATTACHMENT 5:
JOSEPH M. HYLAND FIELD
AREAS OF CONCERN

Joseph M. Hyland Field - Areas of Concern