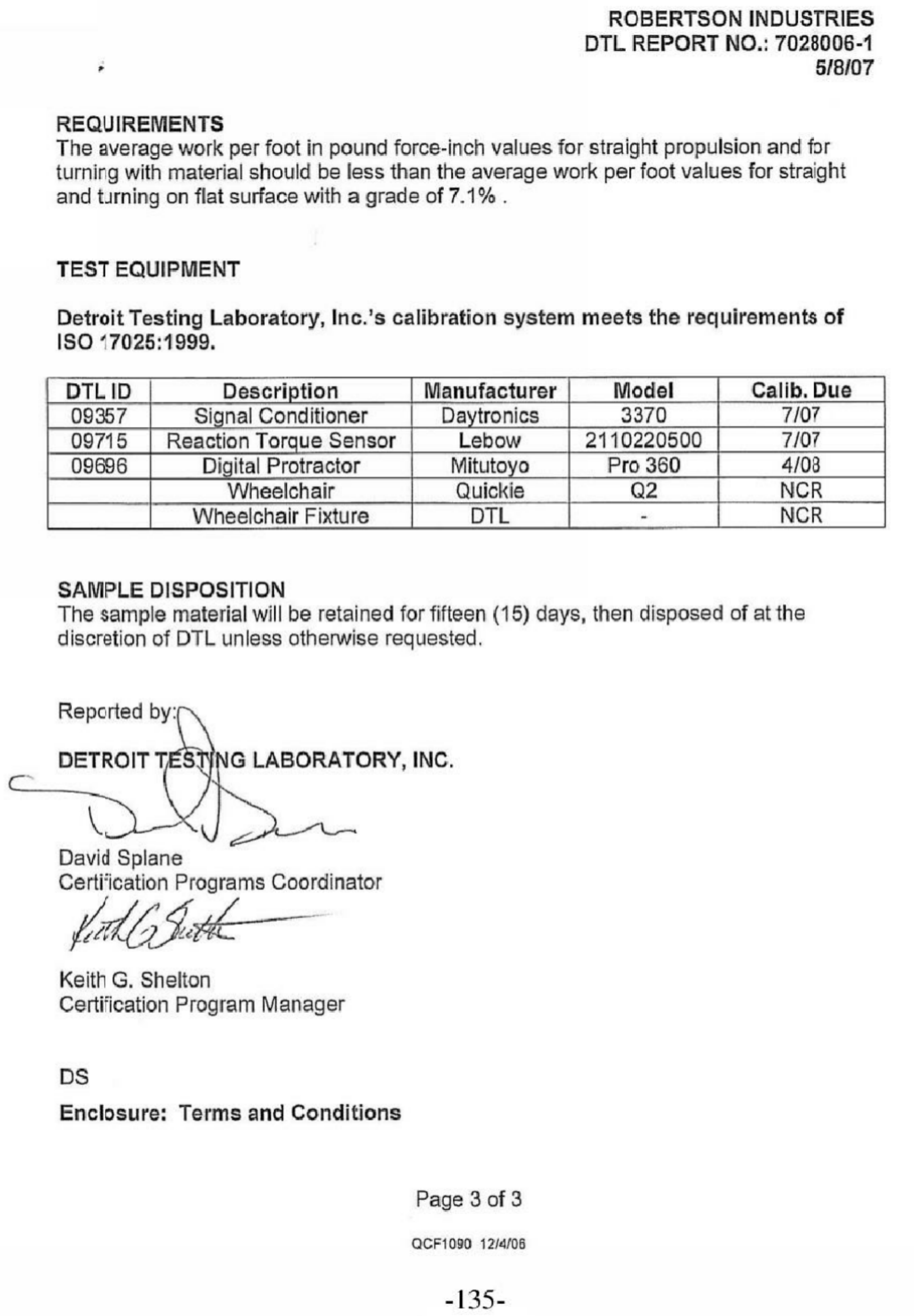


ROBERTSON INDUSTRIES
DTL REPORT NO.: 7028006-1
5/8/07

REQUIREMENTS
The average work per foot in pound force-inch values for straight propulsion and for turning with material should be less than the average work per foot values for straight and turning on flat surface with a grade of 7.1% .

TEST EQUIPMENT

Detroit Testing Laboratory, Inc.'s calibration system meets the requirements of ISO 17025:1999.

DTL ID	Description	Manufacturer	Model	Calib. Due
09357	Signal Conditioner	Daytronics	3370	7/07
09715	Reaction Torque Sensor	Lebow	2110220500	7/07
09696	Digital Protractor	Mitutoyo	Pro 360	4/08
	Wheelchair	Quickie	Q2	NCR
	Wheelchair Fixture	DTL	-	NCR

SAMPLE DISPOSITION
The sample material will be retained for fifteen (15) days, then disposed of at the discretion of DTL unless otherwise requested.

Reported by:

DETROIT TESTING LABORATORY, INC.

David Splane
Certification Programs Coordinator

Keith G. Shelton
Certification Program Manager

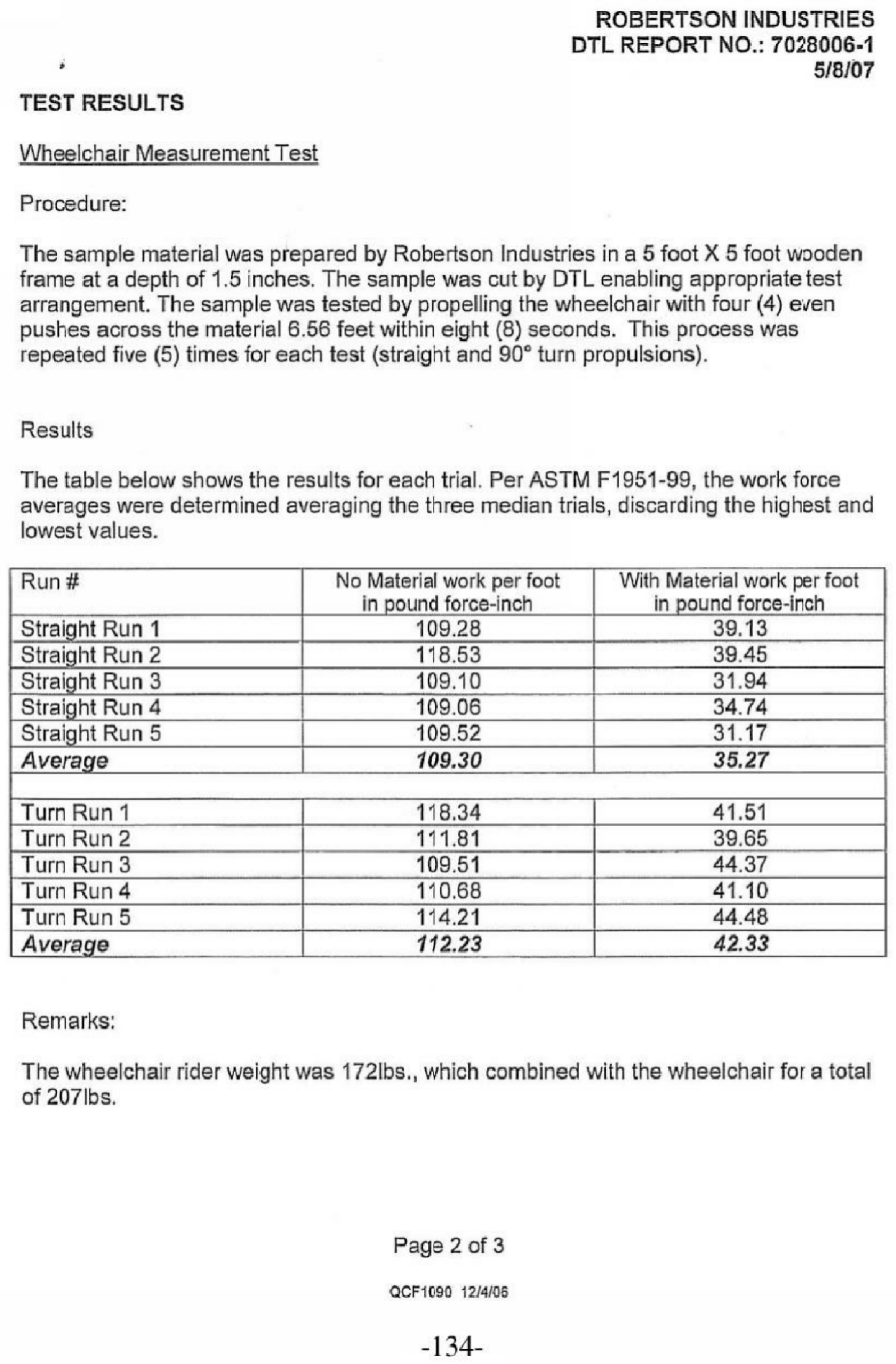
DS

Enclosure: Terms and Conditions

Page 3 of 3

QCF1090 12/4/06

-135-



ROBERTSON INDUSTRIES
DTL REPORT NO.: 7028006-1
5/8/07

TEST RESULTS

Wheelchair Measurement Test

Procedure:

The sample material was prepared by Robertson Industries in a 5 foot X 5 foot wooden frame at a depth of 1.5 inches. The sample was cut by DTL enabling appropriate test arrangement. The sample was tested by propelling the wheelchair with four (4) even pushes across the material 6.56 feet within eight (8) seconds. This process was repeated five (5) times for each test (straight and 90° turn propulsions).

Results

The table below shows the results for each trial. Per ASTM F1951-99, the work force averages were determined averaging the three median trials, discarding the highest and lowest values.

Run #	No Material work per foot in pound force-inch	With Material work per foot in pound force-inch
Straight Run 1	109.28	39.13
Straight Run 2	118.53	39.45
Straight Run 3	109.10	31.94
Straight Run 4	109.06	34.74
Straight Run 5	109.52	31.17
Average	***109.30***	***35.27***
Turn Run 1	118.34	41.51
Turn Run 2	111.81	39.65
Turn Run 3	109.51	44.37
Turn Run 4	110.68	41.10
Turn Run 5	114.21	44.48
Average	***112.23***	***42.33***

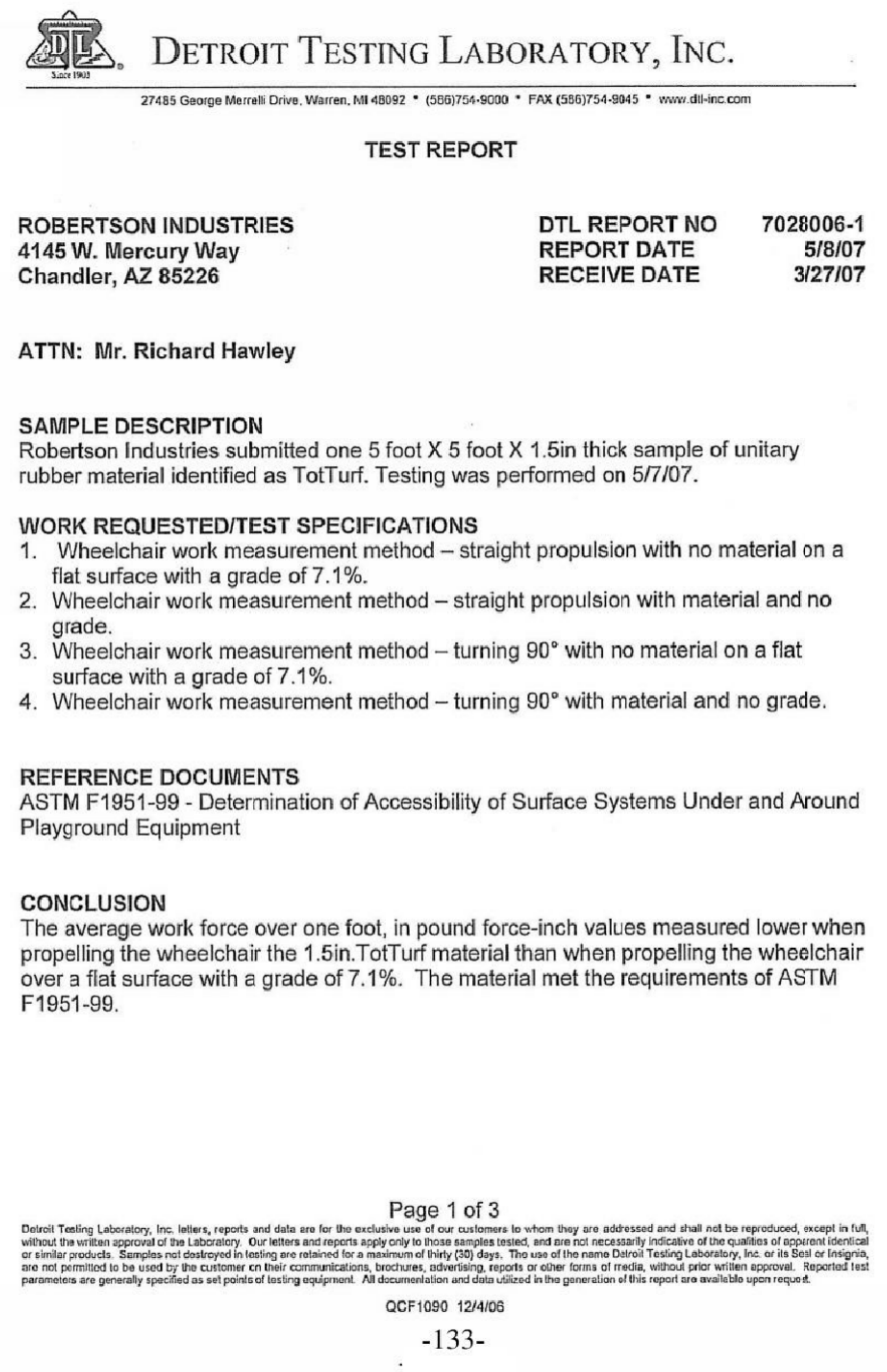
Remarks:

The wheelchair rider weight was 172lbs., which combined with the wheelchair for a total of 207lbs.

Page 2 of 3

QCF1090 12/4/06

-134-



DETROIT TESTING LABORATORY, INC.

27485 George Merrelli Drive, Warren, MI 48092 • (586)754-9000 • FAX (586)754-9045 • www.dtl-inc.com

TEST REPORT

ROBERTSON INDUSTRIES		**DTL REPORT NO**	**7028006-1**
4145 W. Mercury Way		**REPORT DATE**	**5/8/07**
Chandler, AZ 85226		**RECEIVE DATE**	**3/27/07**

ATTN: Mr. Richard Hawley

SAMPLE DESCRIPTION
Robertson Industries submitted one 5 foot X 5 foot X 1.5in thick sample of unitary rubber material identified as TotTurf. Testing was performed on 5/7/07.

WORK REQUESTED/TEST SPECIFICATIONS
1. Wheelchair work measurement method – straight propulsion with no material on a flat surface with a grade of 7.1%.
2. Wheelchair work measurement method – straight propulsion with material and no grade.
3. Wheelchair work measurement method – turning 90° with no material on a flat surface with a grade of 7.1%.
4. Wheelchair work measurement method – turning 90° with material and no grade.

REFERENCE DOCUMENTS
ASTM F1951-99 - Determination of Accessibility of Surface Systems Under and Around Playground Equipment

CONCLUSION
The average work force over one foot, in pound force-inch values measured lower when propelling the wheelchair the 1.5in.TotTurf material than when propelling the wheelchair over a flat surface with a grade of 7.1%. The material met the requirements of ASTM F1951-99.

Page 1 of 3

QCF1090 12/4/06

-133-

1 RUBBER SURFACING ASTM 1951 TEST FOR TT350

SCALE: NTS

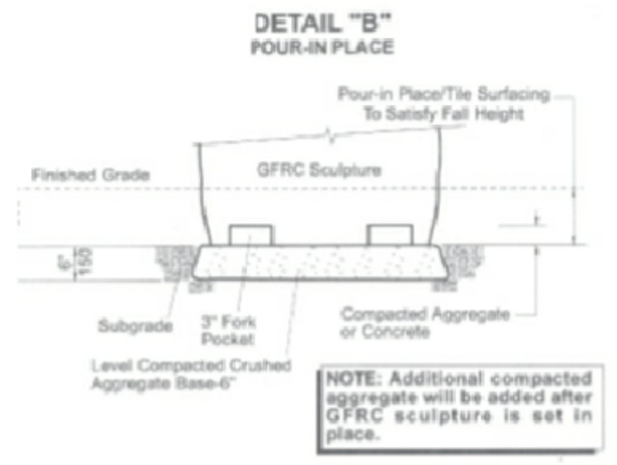
NOTE: HIGH–CONTRAST WARNING STRIPES SHALL BE APPLIED TO EDGES AT CHANGES IN LEVEL. 2" WIDE, 1" CLR OF NOSING, ADHESIVE BACKED, SANDED NON–SLIP SURFACE APPLIED STRIPS. SUBMIT PRODUCT DATA. DARK BROWN COLOR

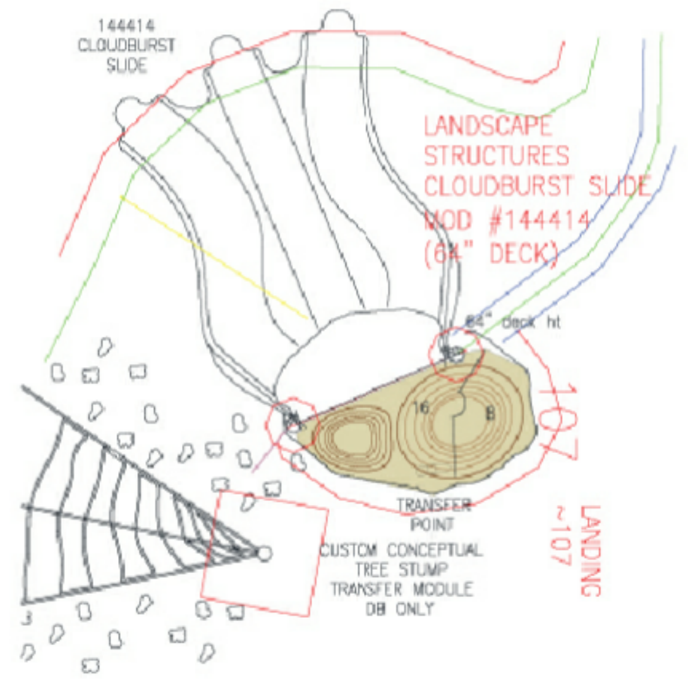
Custom Transfer Stump

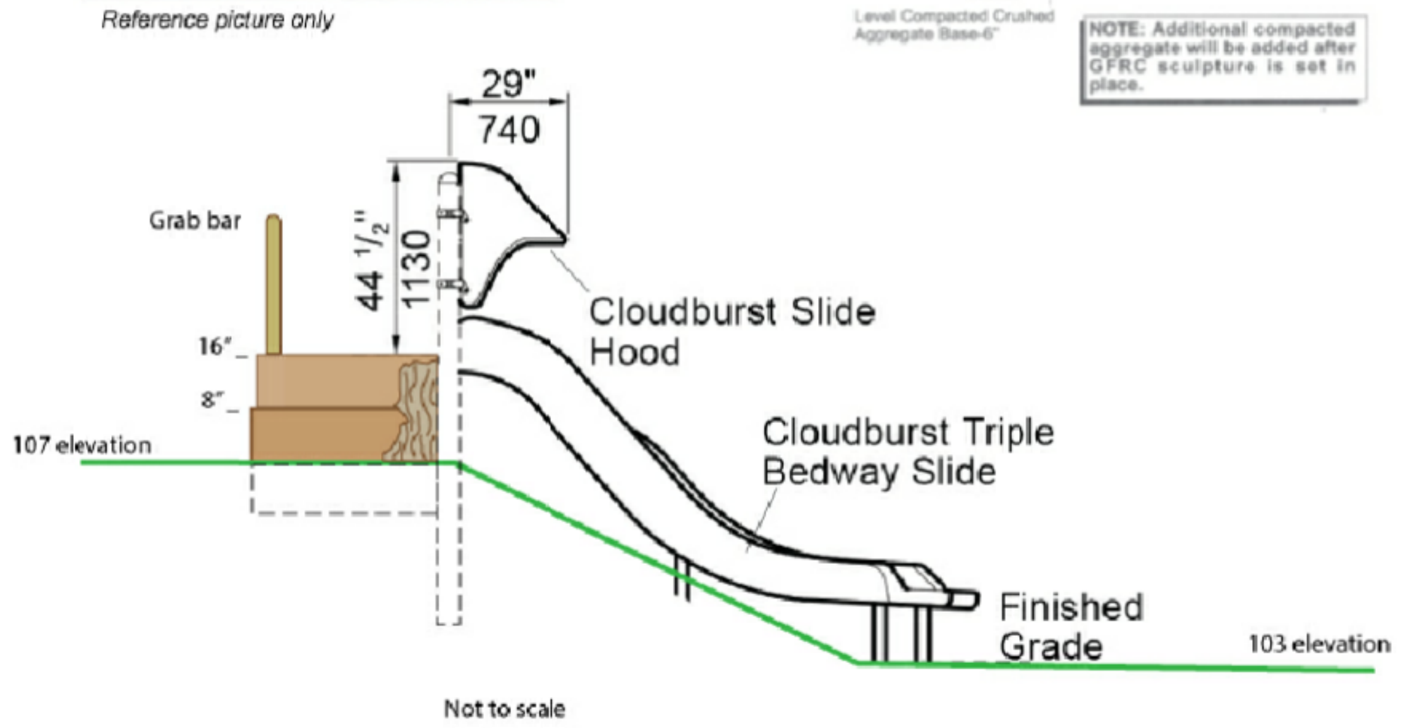
Design Details #65906
Custom built ADA transfer point to configure around cloudburst slide entrance
Includes a 8" step to a 16" platform with grab bar

Construction Details
Built with welded internal steel tubing and rebar skeleton
18 gauge expanded metal is welded to the entire exterior
Coated with 1" sprayed (GFRC) sculptural concrete
Painted with concrete paint / stain
Designed on a fork pocket skid
Bury depth = 12" unless noted otherwise

Reference picture only







Conceptual design only and is subject to possible changes

Custom GFRC lead times can be 12-16 weeks

Robin Sweeney *Ross Recreation Equipment Comapany Inc.* *9-3-2015*

3 CUSTOM TRANSFER STUMP

SCALE: NTS

IPEMA Certificate of Compliance

IPEMA CERTIFIED TO ASTM F1292 – INTERNATIONAL PLAY EQUIPMENT MANUFACTURERS ASSOCIATION – PUBLIC PLAY SURFACING

CERTIFICATE

ISSUE DATE: 9/2/2004

In the interest of public playground safety, IPEMA provides a third-party certification service whereby Detroit Testing Laboratory, Inc. validates a manufacturer's certification of conformance to the ASTM F1292, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment Standard. The manufacturer listed below has received written validation from Detroit Testing Laboratory, Inc. that the products listed below conform with the requirements of ASTM F1292.

Manufacturer
Robertson Industries, Inc.
4145 W. Mercury Way,
Chandler, AZ 85226 United States

PRODUCT #	PRODUCT LINE	DESCRIPTION	THK/HT RATIO
TT350	TotTurf	Poured-In-Place rubber, playground safety surfacing	3.5in/8ft

1 of 1 You may verify this certificate by visiting IPEMA's website at http://www.ipema.org

Detroit Testing Laboratory

2 RUBBER SURFACING ASTM 1292 TEST FOR TT350

SCALE: NTS

CARDUCCI & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE PLANNING
IRRIGATION DESIGN URBAN DESIGN
555 BEACH STREET, 4TH FLOOR
SAN FRANCISCO, CALIFORNIA 94133
PHONE (415) 674-0990 FAX (415) 674-0999

2554
Signature
8.31.2017
Renewal Date
10.2.2015
Date

seal

consultant

CITY OF
SAUSALITO

owner

ROBIN SWEENY
PARK

APN 064-165-012

420 LITHO STREET
SAUSALITO, CA, 94965

project

no.	description	date
1	PLANNING SUBMITTAL	02.01.2013
2	PLANNING SUBMITTAL	10.15.2013
3	PLANNING SUBMITTAL	07.29.2015
4	PERMIT SUBMITTAL	10.02.2015

no. description

key map

date	10.02.2015
scale	AS SHOWN
project no.	COS10-01

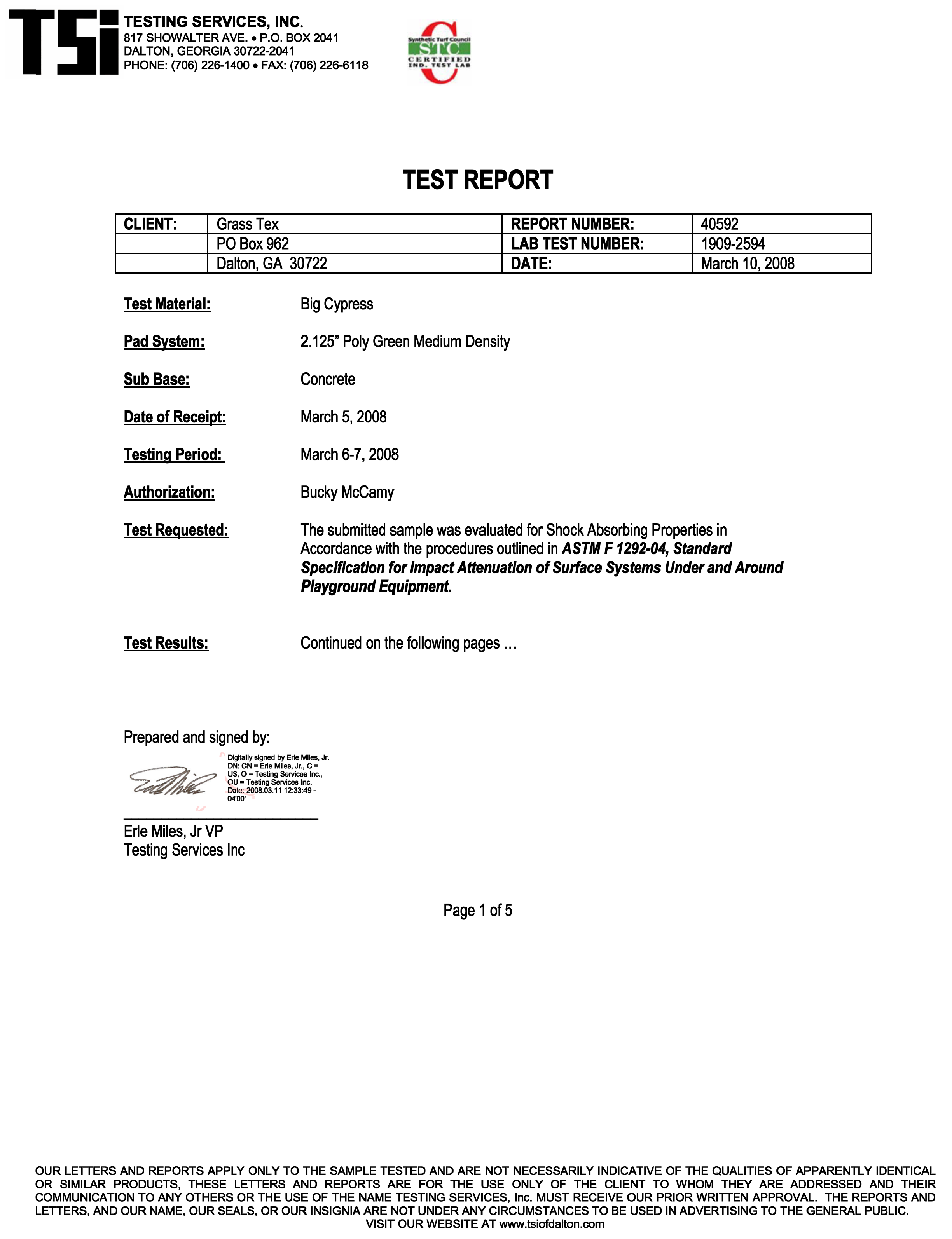
CONSTRUCTION
DETAILS

sheet title

L9.11

sheet no.

49 OF 58



TESTING SERVICES, INC.
817 SHOWALTER AVE. • P.O. BOX 2041
DALTON, GEORGIA 30722-2041
PHONE: (706) 226-1400 • FAX: (706) 226-6118

TEST REPORT

CLIENT:	Grass Tex	**REPORT NUMBER:**	40592
	PO Box 962	**LAB TEST NUMBER:**	1909-2594
	Dalton, GA 30722	**DATE:**	March 10, 2008

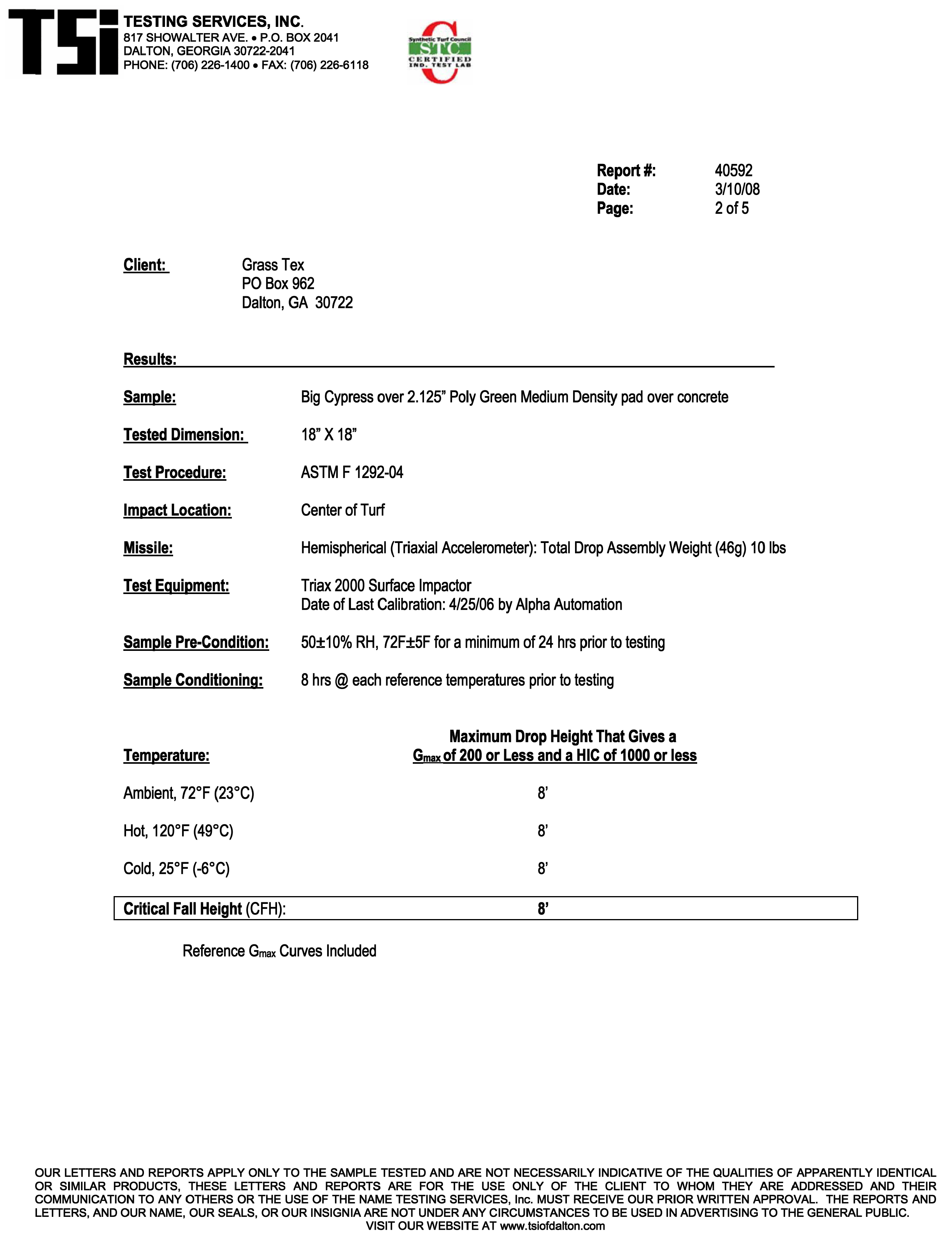
Test Material:	Big Cypress
Pad System:	2.125" Poly Green Medium Density
Sub Base:	Concrete
Date of Receipt:	March 5, 2008
Testing Period:	March 6-7, 2008
Authorization:	Bucky McCamy
Test Requested:	The submitted sample was evaluated for Shock Absorbing Properties in Accordance with the procedures outlined in ***ASTM F 1292-04, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.***
Test Results:	Continued on the following pages …

Prepared and signed by:

Digitally signed by Erle Miles, Jr.
DN: CN = Erle Miles, Jr., C = US, O = Testing Services Inc., OU = Testing Services Inc.
Date: 2008.03.11 12:33:49 -04'00'

Erle Miles, Jr VP
Testing Services Inc

Page 1 of 5



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DALTON, GEORGIA 30722-2041
PHONE: (706) 226-1400 • FAX: (706) 226-6118

Report #: 40592
Date: 3/10/08
Page: 2 of 5

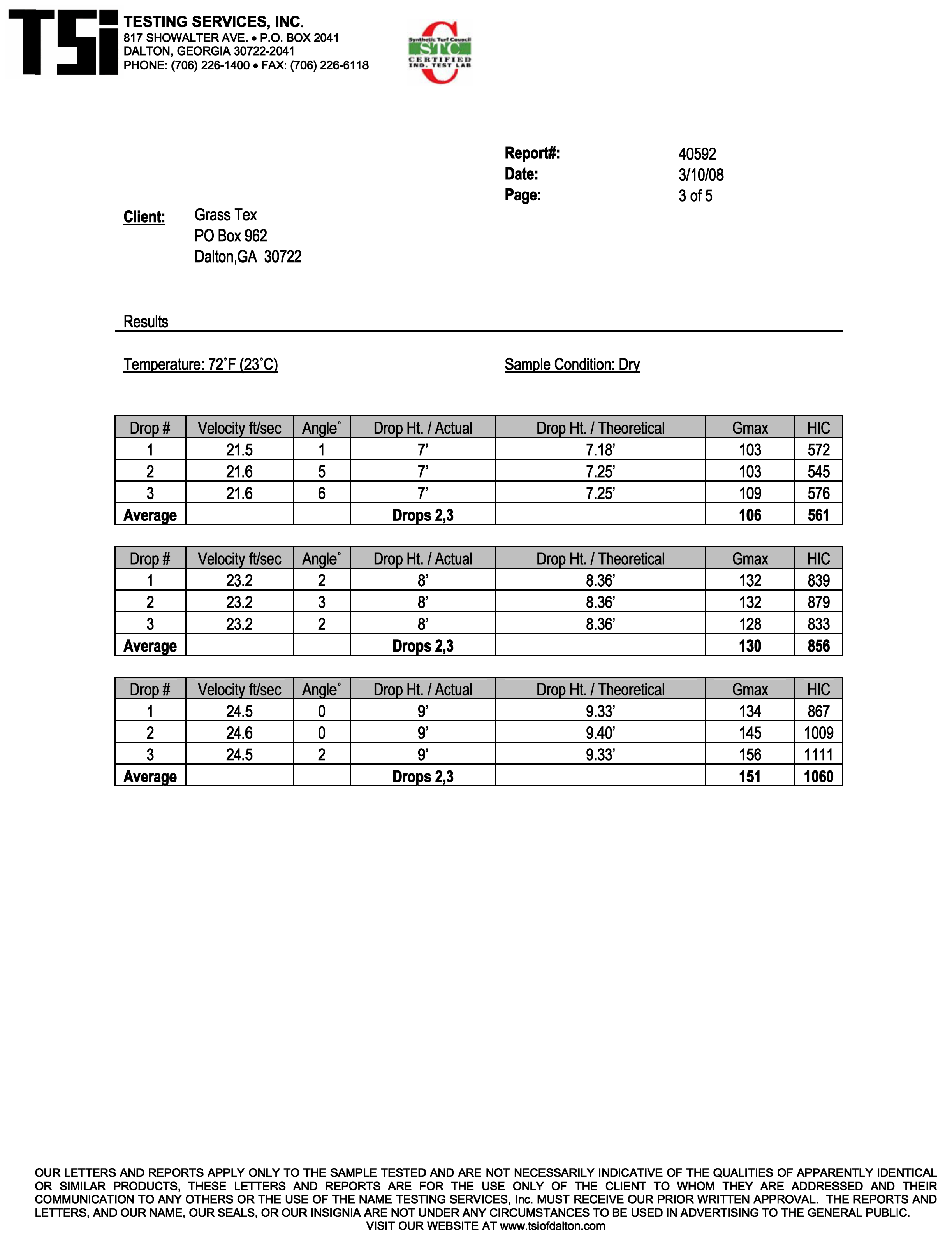
Client:
Grass Tex
PO Box 962
Dalton, GA 30722

Results:

Sample:	Big Cypress over 2.125" Poly Green Medium Density pad over concrete
Tested Dimension:	18" X 18"
Test Procedure:	ASTM F 1292-04
Impact Location:	Center of Turf
Missile:	Hemispherical (Triaxial Accelerometer): Total Drop Assembly Weight (46g) 10 lbs
Test Equipment:	Triax 2000 Surface Impactor Date of Last Calibration: 4/25/06 by Alpha Automation
Sample Pre-Condition:	50±10% RH, 72F±5F for a minimum of 24 hrs prior to testing
Sample Conditioning:	8 hrs @ each reference temperatures prior to testing

Temperature:	**Maximum Drop Height That Gives a G_{max} of 200 or Less and a HIC of 1000 or less**
Ambient, 72°F (23°C)	8'
Hot, 120°F (49°C)	8'
Cold, 25°F (-6°C)	8'
Critical Fall Height (CFH):	**8'**

Reference G_{max} Curves Included



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PHONE: (706) 226-1400 • FAX: (706) 226-6118

Report#: 40592
Date: 3/10/08
Page: 3 of 5

Client:
Grass Tex
PO Box 962
Dalton,GA 30722

Results

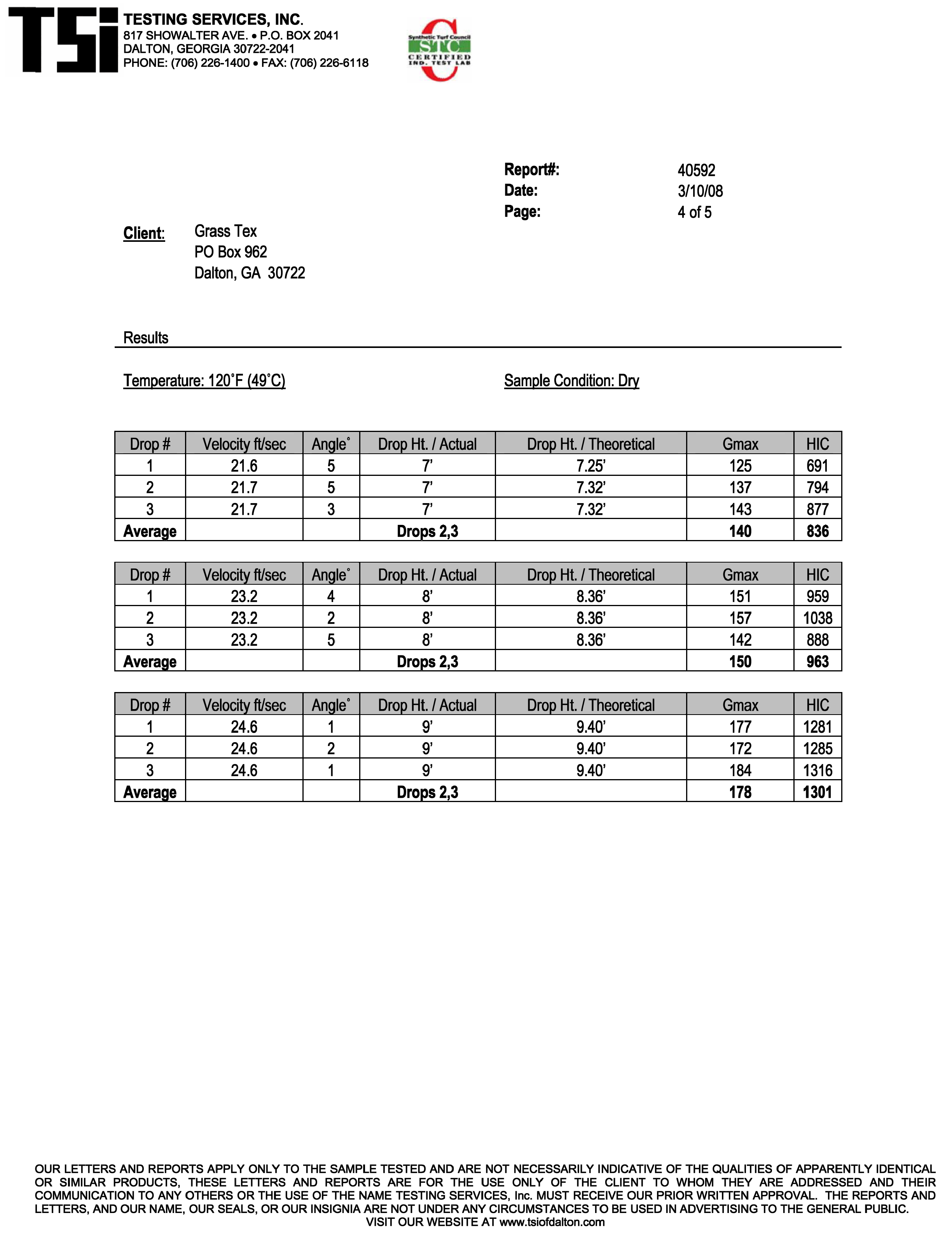
Temperature: 72˚F (23˚C)

Sample Condition: Dry

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	21.5	1	7'	7.18'	103	572
2	21.6	5	7'	7.25'	103	545
3	21.6	6	7'	7.25'	109	576
Average			**Drops 2,3**		**106**	**561**

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	23.2	2	8'	8.36'	132	839
2	23.2	3	8'	8.36'	132	879
3	23.2	2	8'	8.36'	128	833
Average			**Drops 2,3**		**130**	**856**

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	24.5	0	9'	9.33'	134	867
2	24.6	0	9'	9.40'	145	1009
3	24.5	2	9'	9.33'	156	1111
Average			**Drops 2,3**		**151**	**1060**



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PHONE: (706) 226-1400 • FAX: (706) 226-6118

Report#: 40592
Date: 3/10/08
Page: 4 of 5

Client:
Grass Tex
PO Box 962
Dalton, GA 30722

Results

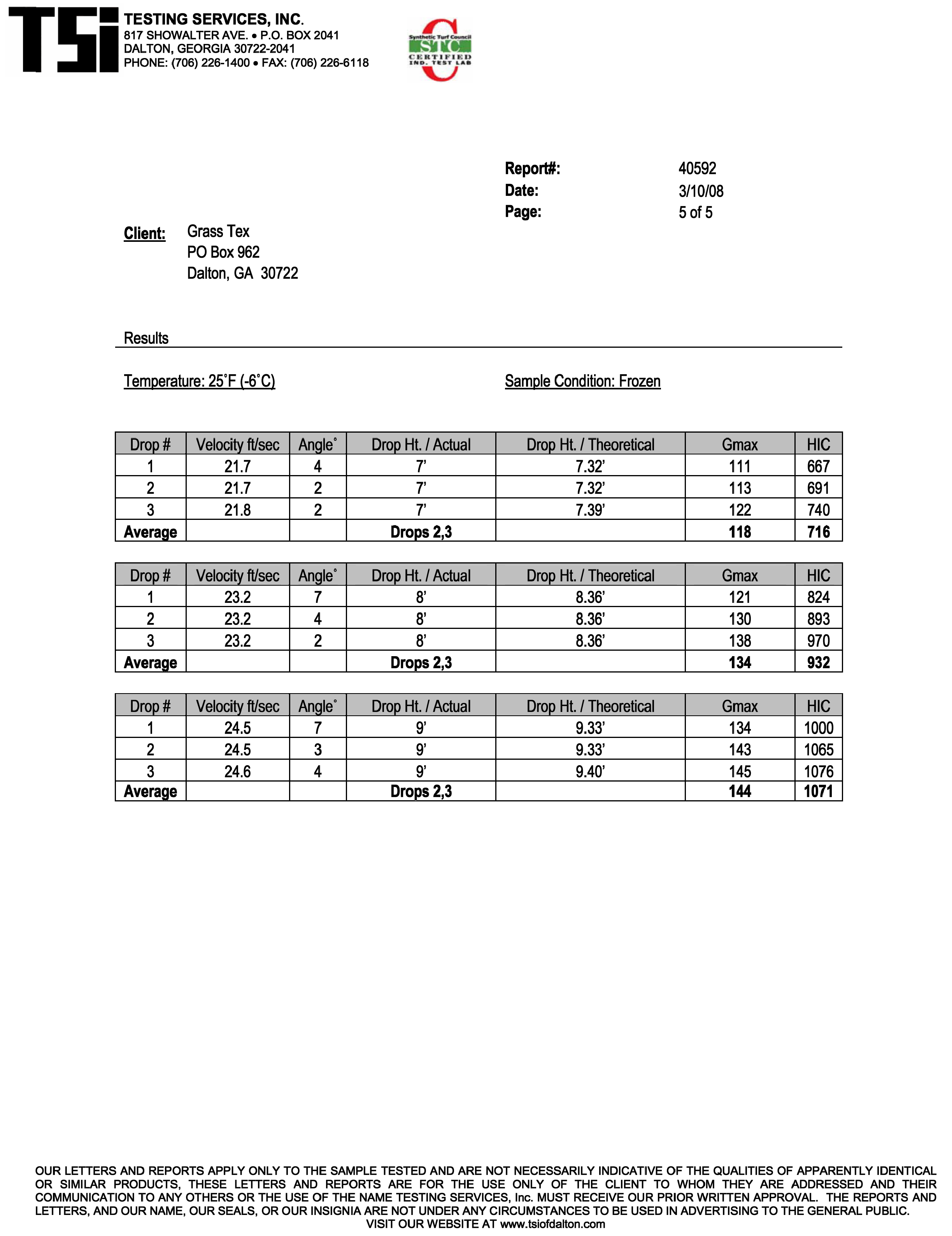
Temperature: 120˚F (49˚C)

Sample Condition: Dry

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	21.6	5	7'	7.25'	125	691
2	21.7	5	7'	7.32'	137	794
3	21.7	3	7'	7.32'	143	877
Average			**Drops 2,3**		**140**	**836**

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	23.2	4	8'	8.36'	151	959
2	23.2	2	8'	8.36'	157	1038
3	23.2	5	8'	8.36'	142	888
Average			**Drops 2,3**		**150**	**963**

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	24.6	1	9'	9.40'	177	1281
2	24.6	2	9'	9.40'	172	1285
3	24.6	1	9'	9.40'	184	1316
Average			**Drops 2,3**		**178**	**1301**



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DALTON, GEORGIA 30722-2041
PHONE: (706) 226-1400 • FAX: (706) 226-6118

Report#: 40592
Date: 3/10/08
Page: 5 of 5

Client:
Grass Tex
PO Box 962
Dalton, GA 30722

Results

Temperature: 25˚F (-6˚C)

Sample Condition: Frozen

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	21.7	4	7'	7.32'	111	667
2	21.7	2	7'	7.32'	113	691
3	21.8	2	7'	7.39'	122	740
Average			**Drops 2,3**		**118**	**716**

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	23.2	7	8'	8.36'	121	824
2	23.2	4	8'	8.36'	130	893
3	23.2	2	8'	8.36'	138	970
Average			**Drops 2,3**		**134**	**932**

Drop #	Velocity ft/sec	Angle˚	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	24.5	7	9'	9.33'	134	1000
2	24.5	3	9'	9.33'	143	1065
3	24.6	4	9'	9.40'	145	1076
Average			**Drops 2,3**		**144**	**1071**

---

1 SYNTHETIC TURF FOAM UNDERLAYMENT ASTM F1292 CERTIFICATION TEST

SCALE: NTS

10/7/2015 12:15 PM

Only the original, signed hard copy of this drawing constitutes Carducci & Associates professional work product, electronic copies do not. Carducci & Associates will not be responsible for any modifications made to this drawing electronic or otherwise that is not signed by Carducci & Associates.
If the contractor encounters errors or discrepancies on the drawings, or site conditions which prevent or delay the completion of work as indicated, the contractor shall notify the owner and landscape architect by the time of bid of all such errors, discrepancies and omissions. The contractor shall indemnify and hold the landscape architect and the owner harmless if after contracting for the work he has monetary damage because of site conditions, errors, discrepancies or omissions at the time of bid.

CARDUCCI & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE PLANNING
IRRIGATION DESIGN URBAN DESIGN
555 BEACH STREET, 4TH FLOOR
SAN FRANCISCO, CALIFORNIA 94133
PHONE (415) 674-0990 FAX (415) 674-0999

2554
8.31.2017
Renewal Date
10.2.2015
Date

seal

consultant

CITY OF
SAUSALITO

owner

ROBIN SWEENY
PARK

APN 064-165-012

420 LITHO STREET
SAUSALITO, CA, 94965

project

no.	description	
1	PLANNING SUBMITTAL	02.01.2013
2	PLANNING SUBMITTAL	10.15.2013
3	PLANNING SUBMITTAL	07.29.2015
4	PERMIT SUBMITTAL	10.02.2015

key map

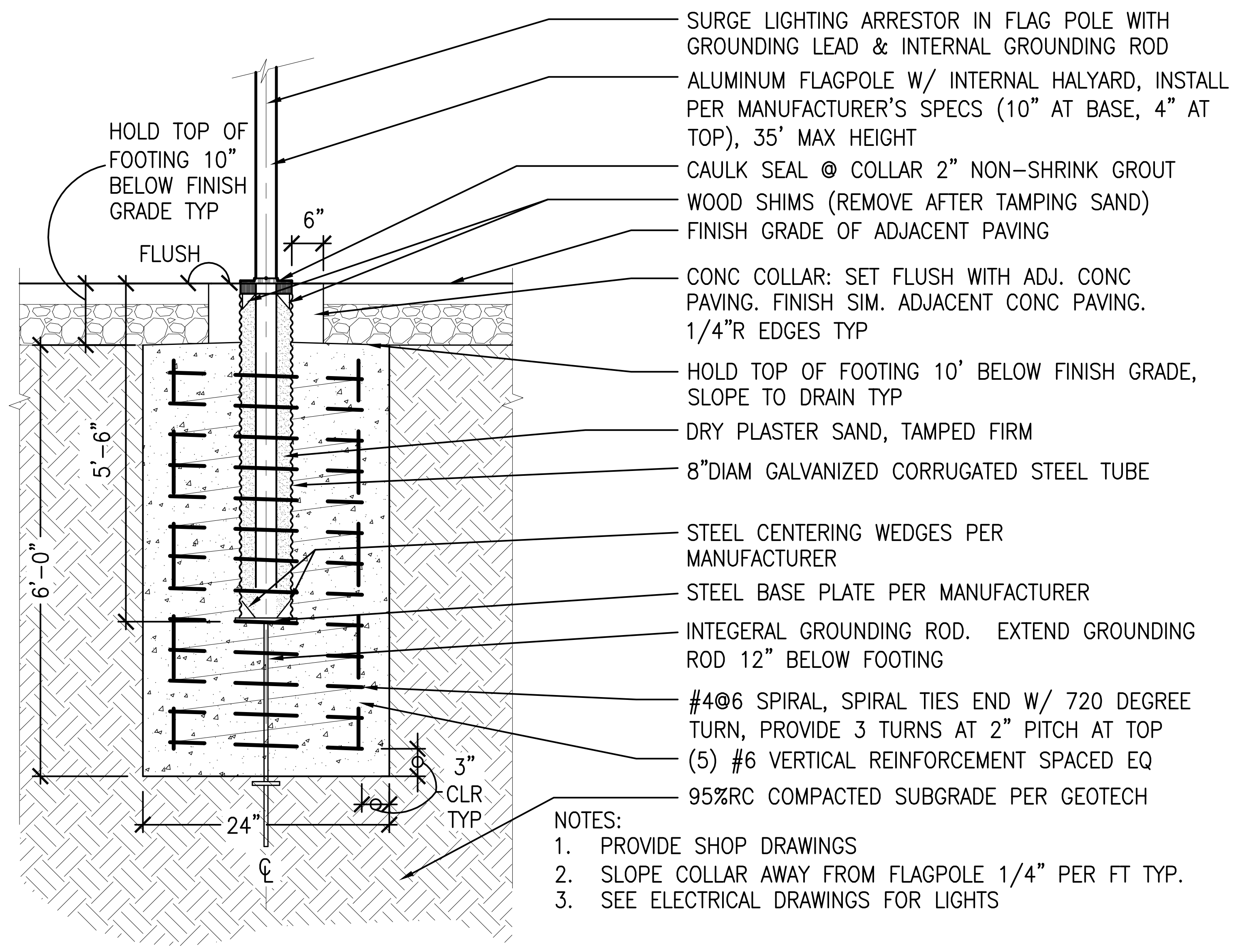
date	10.02.2015
scale	AS SHOWN
project no.	COS10-01

CONSTRUCTION
DETAILS

sheet title

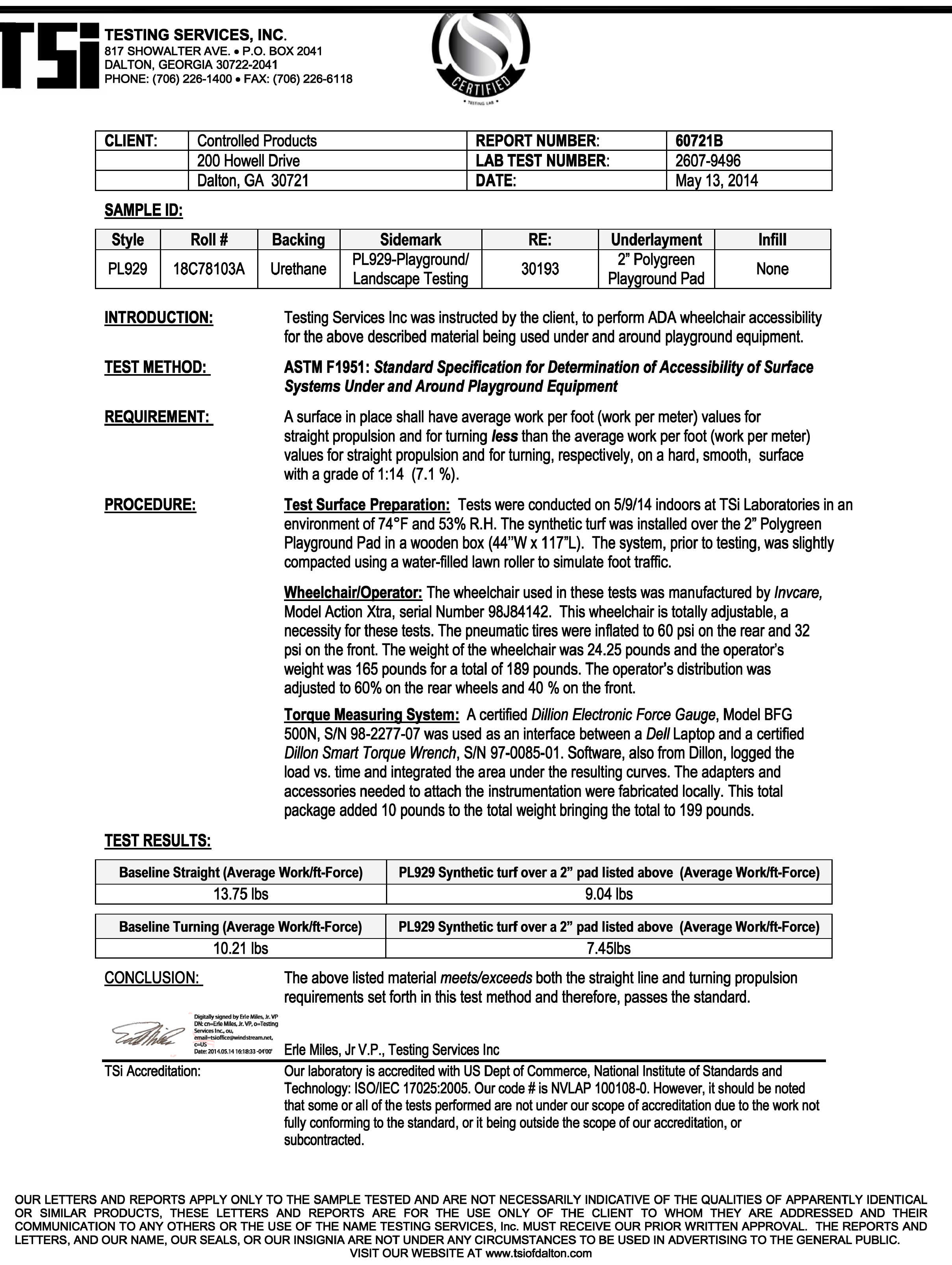
L9.12

sheet no.



NOTES:
1. PROVIDE SHOP DRAWINGS
2. SLOPE COLLAR AWAY FROM FLAGPOLE 1/4" PER FT TYP.
3. SEE ELECTRICAL DRAWINGS FOR LIGHTS

4 FLAG POLE FOOTING
SCALE: 1/2" = 1'



TESTING SERVICES, INC.
817 SHOWALTER AVE. • P.O. BOX 2041
DALTON, GEORGIA 30722-2041
PHONE: (706) 226-1400 • FAX: (706) 226-6118

CLIENT:	Controlled Products	**REPORT NUMBER:**	**60721B**
	200 Howell Drive	**LAB TEST NUMBER:**	2607-9496
	Dalton, GA 30721	**DATE:**	May 13, 2014

SAMPLE ID:

Style	Roll #	Backing	Sidemark	RE:	Underlayment	Infill
PL929	18C78103A	Urethane	PL929-Playground/ Landscape Testing	30193	2" Polygreen Playground Pad	None

INTRODUCTION: Testing Services Inc was instructed by the client, to perform ADA wheelchair accessibility for the above described material being used under and around playground equipment.

TEST METHOD: **ASTM F1951: *Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment***

REQUIREMENT: A surface in place shall have average work per foot (work per meter) values for straight propulsion and for turning ***less*** than the average work per foot (work per meter) values for straight propulsion and for turning, respectively, on a hard, smooth, surface with a grade of 1:14 (7.1 %).

PROCEDURE: **Test Surface Preparation:** Tests were conducted on 5/9/14 indoors at TSi Laboratories in an environment of 74°F and 53% R.H. The synthetic turf was installed over the 2" Polygreen Playground Pad in a wooden box (44"W x 117"L). The system, prior to testing, was slightly compacted using a water-filled lawn roller to simulate foot traffic.

Wheelchair/Operator: The wheelchair used in these tests was manufactured by *Invcare,* Model Action Xtra, serial Number 98J84142. This wheelchair is totally adjustable, a necessity for these tests. The pneumatic tires were inflated to 60 psi on the rear and 32 psi on the front. The weight of the wheelchair was 24.25 pounds and the operator's weight was 165 pounds for a total of 189 pounds. The operator's distribution was adjusted to 60% on the rear wheels and 40 % on the front.

Torque Measuring System: A certified *Dillion Electronic Force Gauge*, Model BFG 500N, S/N 98-2277-07 was used as an interface between a *Dell* Laptop and a certified *Dillon Smart Torque Wrench*, S/N 97-0085-01. Software, also from Dillon, logged the load vs. time and integrated the area under the resulting curves. The adapters and accessories needed to attach the instrumentation were fabricated locally. This total package added 10 pounds to the total weight bringing the total to 199 pounds.

TEST RESULTS:

Baseline Straight (Average Work/ft-Force)	PL929 Synthetic turf over a 2" pad listed above (Average Work/ft-Force)
13.75 lbs	9.04 lbs

Baseline Turning (Average Work/ft-Force)	PL929 Synthetic turf over a 2" pad listed above (Average Work/ft-Force)
10.21 lbs	7.45lbs

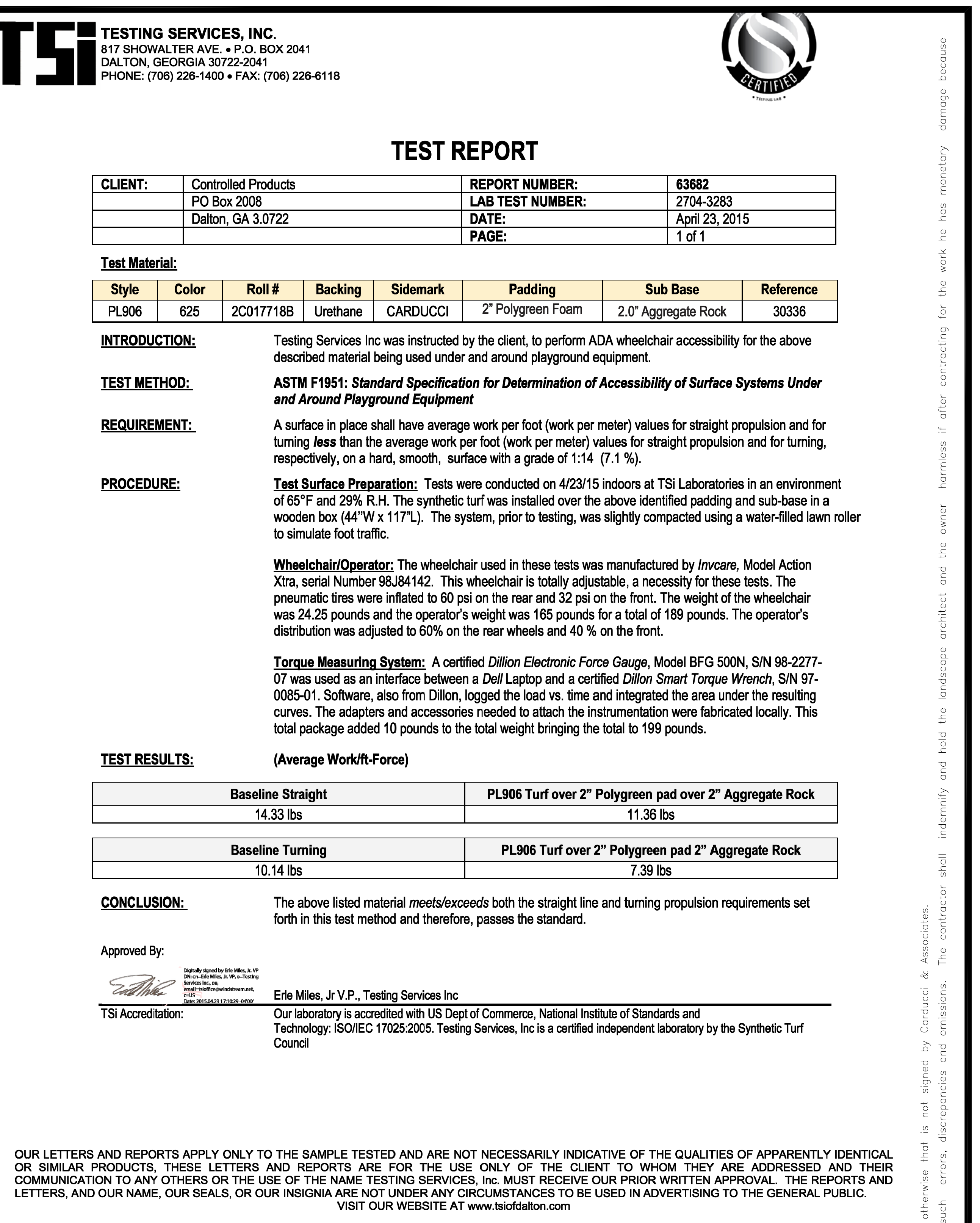
CONCLUSION: The above listed material *meets/exceeds* both the straight line and turning propulsion requirements set forth in this test method and therefore, passes the standard.

Digitally signed by Erle Miles, Jr. VP
DN: cn=Erle Miles, Jr. VP, o=Testing Services Inc., ou, email=tsioffice@windstream.net, c=US
Date: 2014.05.14 16:18:33 -04'00'

Erle Miles, Jr V.P., Testing Services Inc

TSi Accreditation: Our laboratory is accredited with US Dept of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. Our code # is NVLAP 100108-0. However, it should be noted that some or all of the tests performed are not under our scope of accreditation due to the work not fully conforming to the standard, or it being outside the scope of our accreditation, or subcontracted.

OUR LETTERS AND REPORTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, THESE LETTERS AND REPORTS ARE FOR THE USE ONLY OF THE CLIENT TO WHOM THEY ARE ADDRESSED AND THEIR COMMUNICATION TO ANY OTHERS OR THE USE OF THE NAME TESTING SERVICES, Inc. MUST RECEIVE OUR PRIOR WRITTEN APPROVAL. THE REPORTS AND LETTERS, AND OUR NAME, OUR SEALS, OR OUR INSIGNIA ARE NOT UNDER ANY CIRCUMSTANCES TO BE USED IN ADVERTISING TO THE GENERAL PUBLIC.
VISIT OUR WEBSITE AT www.tsiofdalton.com



TESTING SERVICES, INC.
817 SHOWALTER AVE. • P.O. BOX 2041
DALTON, GEORGIA 30722-2041
PHONE: (706) 226-1400 • FAX: (706) 226-6118

TEST REPORT

CLIENT:	Controlled Products	**REPORT NUMBER:**	**63682**
	PO Box 2008	**LAB TEST NUMBER:**	2704-3283
	Dalton, GA 3.0722	**DATE:**	April 23, 2015
		PAGE:	1 of 1

Test Material:

Style	Color	Roll #	Backing	Sidemark	Padding	Sub Base	Reference
PL906	625	2C017718B	Urethane	CARDUCCI	2" Polygreen Foam	2.0" Aggregate Rock	30336

INTRODUCTION: Testing Services Inc was instructed by the client, to perform ADA wheelchair accessibility for the above described material being used under and around playground equipment.

TEST METHOD: **ASTM F1951: *Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment***

REQUIREMENT: A surface in place shall have average work per foot (work per meter) values for straight propulsion and for turning ***less*** than the average work per foot (work per meter) values for straight propulsion and for turning, respectively, on a hard, smooth, surface with a grade of 1:14 (7.1 %).

PROCEDURE: **Test Surface Preparation:** Tests were conducted on 4/23/15 indoors at TSi Laboratories in an environment of 65°F and 29% R.H. The synthetic turf was installed over the above identified padding and sub-base in a wooden box (44"W x 117"L). The system, prior to testing, was slightly compacted using a water-filled lawn roller to simulate foot traffic.

Wheelchair/Operator: The wheelchair used in these tests was manufactured by *Invcare,* Model Action Xtra, serial Number 98J84142. This wheelchair is totally adjustable, a necessity for these tests. The pneumatic tires were inflated to 60 psi on the rear and 32 psi on the front. The weight of the wheelchair was 24.25 pounds and the operator's weight was 165 pounds for a total of 189 pounds. The operator's distribution was adjusted to 60% on the rear wheels and 40 % on the front.

Torque Measuring System: A certified *Dillion Electronic Force Gauge*, Model BFG 500N, S/N 98-2277-07 was used as an interface between a *Dell* Laptop and a certified *Dillon Smart Torque Wrench*, S/N 97-0085-01. Software, also from Dillon, logged the load vs. time and integrated the area under the resulting curves. The adapters and accessories needed to attach the instrumentation were fabricated locally. This total package added 10 pounds to the total weight bringing the total to 199 pounds.

TEST RESULTS: **(Average Work/ft-Force)**

Baseline Straight	PL906 Turf over 2" Polygreen pad over 2" Aggregate Rock
14.33 lbs	11.36 lbs

Baseline Turning	PL906 Turf over 2" Polygreen pad 2" Aggregate Rock
10.14 lbs	7.39 lbs

CONCLUSION: The above listed material *meets/exceeds* both the straight line and turning propulsion requirements set forth in this test method and therefore, passes the standard.

Approved By:

Digitally signed by Erle Miles, Jr. VP
DN: cn=Erle Miles, Jr. VP, o=Testing Services Inc., ou, email=tsioffice@windstream.net, c=US
Date: 2015.04.23 17:10:29 -04'00'

Erle Miles, Jr V.P., Testing Services Inc

TSi Accreditation: Our laboratory is accredited with US Dept of Commerce, National Institute of Standards and Technology: ISO/IEC 17025:2005. Testing Services, Inc is a certified independent laboratory by the Synthetic Turf Council

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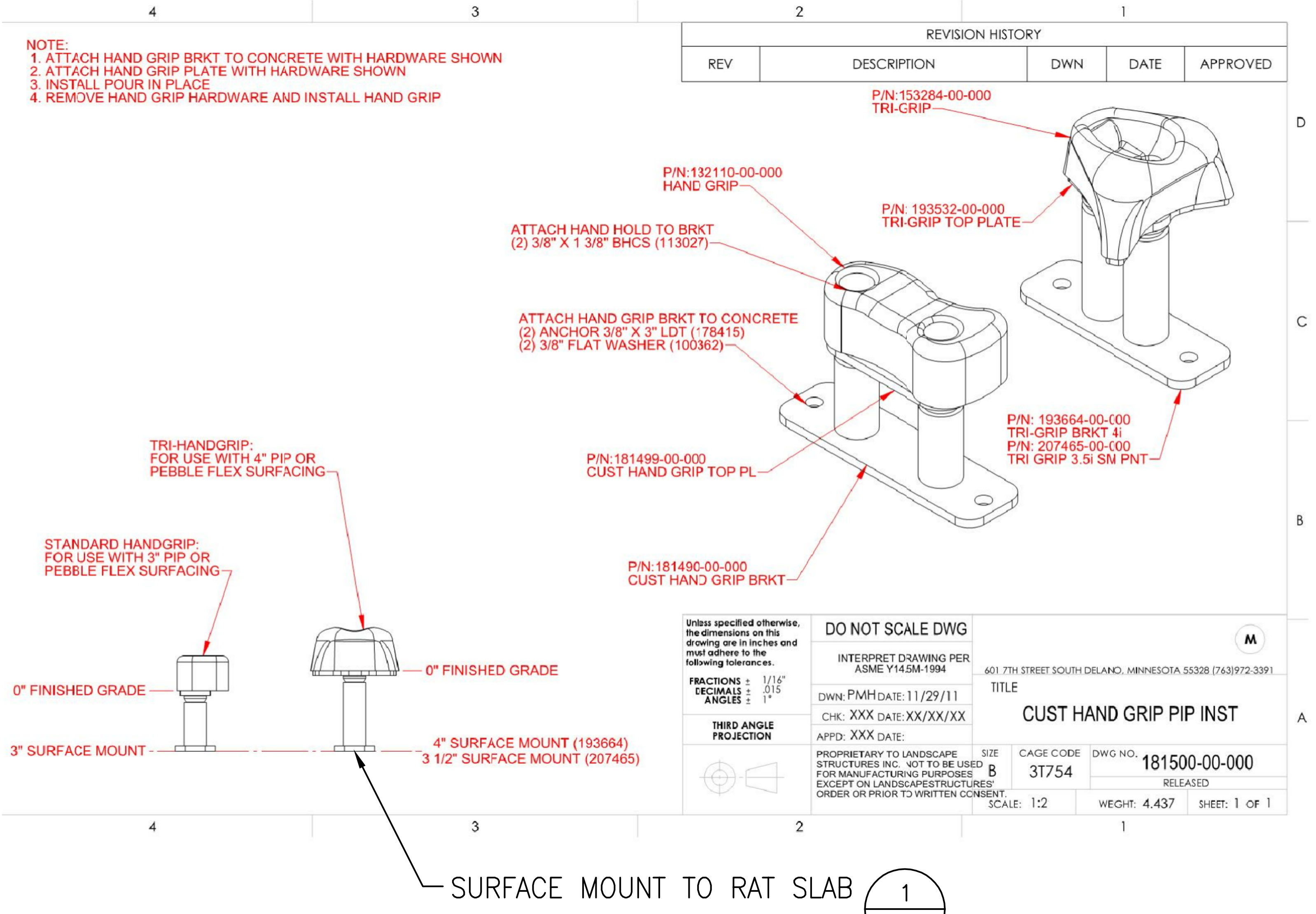
1 SYNTHETIC TURF ASTM F1951 CERTIFICATION TEST FOR PL929 AND PL906
SCALE: NTS

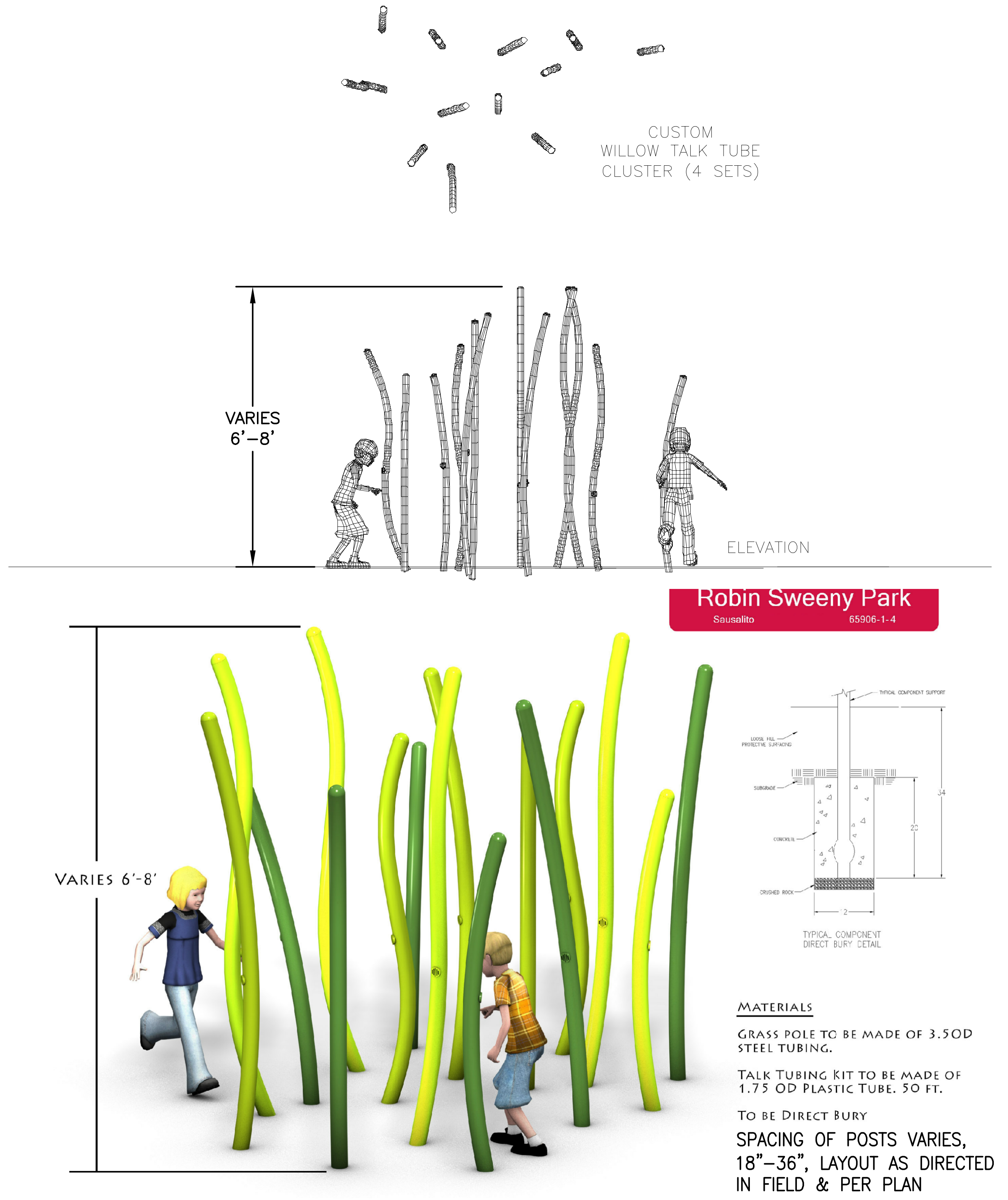


NOTE:
1. ATTACH HAND GRIP BRKT TO CONCRETE WITH HARDWARE SHOWN
2. ATTACH HAND GRIP PLATE WITH HARDWARE SHOWN
3. INSTALL POUR IN PLACE
4. REMOVE HAND GRIP HARDWARE AND INSTALL HAND GRIP

REVISION HISTORY				
REV	DESCRIPTION	DWN	DATE	APPROVED

Unless specified otherwise, the dimensions on this drawing are in inches and must adhere to the following tolerances.
FRACTIONS ± 1/16"
DECIMALS ± .015
ANGLES ± 1°
THIRD ANGLE PROJECTION
DO NOT SCALE DWG
INTERPRET DRAWING PER ASME Y14.5M-1994
DWN: PMH DATE: 11/29/11
CHK: XXX DATE: XX/XX/XX
APPD: XXX DATE:
PROPRIETARY TO LANDSCAPE STRUCTURES INC. NOT TO BE USED FOR MANUFACTURING PURPOSES EXCEPT ON LANDSCAPESTRUCTURES' ORDER OR PRIOR TO WRITTEN CONSENT.
601 7TH STREET SOUTH DELANO, MINNESOTA 55328 (763)972-3391
TITLE
CUST HAND GRIP PIP INST
SIZE B
CAGE CODE 3T754
DWG NO. 181500-00-000
RELEASED
SCALE: 1:2
WEIGHT: 4.437
SHEET: 1 OF 1

5 HAND HOLDS
SCALE: 7 85/128" = 1'



MATERIALS

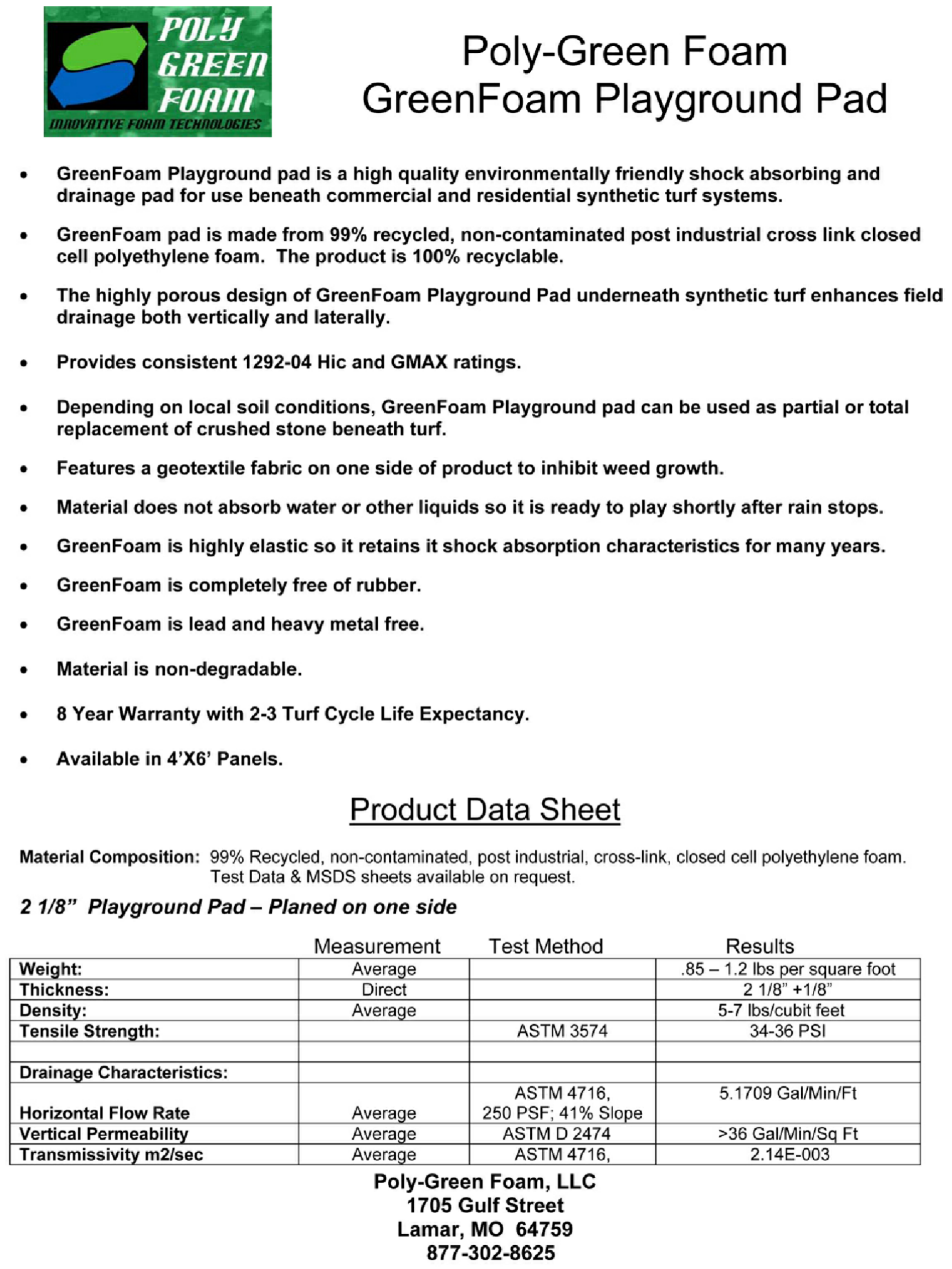
GRASS POLE TO BE MADE OF 3.50D STEEL TUBING.

TALK TUBING KIT TO BE MADE OF 1.75 OD PLASTIC TUBE. 50 FT.

TO BE DIRECT BURY

SPACING OF POSTS VARIES, 18"-36", LAYOUT AS DIRECTED IN FIELD & PER PLAN

3 WILLOW TALK TUBES
SCALE: NTS



POLY GREEN FOAM
INNOVATIVE FOAM TECHNOLOGIES

Poly-Green Foam
GreenFoam Playground Pad

- **GreenFoam Playground pad is a high quality environmentally friendly shock absorbing and drainage pad for use beneath commercial and residential synthetic turf systems.**
- **GreenFoam pad is made from 99% recycled, non-contaminated post industrial cross link closed cell polyethylene foam. The product is 100% recyclable.**
- **The highly porous design of GreenFoam Playground Pad underneath synthetic turf enhances field drainage both vertically and laterally.**
- **Provides consistent 1292-04 Hic and GMAX ratings.**
- **Depending on local soil conditions, GreenFoam Playground pad can be used as partial or total replacement of crushed stone beneath turf.**
- **Features a geotextile fabric on one side of product to inhibit weed growth.**
- **Material does not absorb water or other liquids so it is ready to play shortly after rain stops.**
- **GreenFoam is highly elastic so it retains it shock absorption characteristics for many years.**
- **GreenFoam is completely free of rubber.**
- **GreenFoam is lead and heavy metal free.**
- **Material is non-degradable.**
- **8 Year Warranty with 2-3 Turf Cycle Life Expectancy.**
- **Available in 4'X6' Panels.**

Product Data Sheet

Material Composition: 99% Recycled, non-contaminated, post industrial, cross-link, closed cell polyethylene foam. Test Data & MSDS sheets available on request.

2 1/8" Playground Pad – Planed on one side

	Measurement	Test Method	Results
Weight:	Average		.85 – 1.2 lbs per square foot
Thickness:	Direct		2 1/8" +1/8"
Density:	Average		5-7 lbs/cubit feet
Tensile Strength:		ASTM 3574	34-36 PSI
Drainage Characteristics:			
Horizontal Flow Rate	Average	ASTM 4716, 250 PSF; 41% Slope	5.1709 Gal/Min/Ft
Vertical Permeability	Average	ASTM D 2474	>36 Gal/Min/Sq Ft
Transmissivity m2/sec	Average	ASTM 4716,	2.14E-003

Poly-Green Foam, LLC
1705 Gulf Street
Lamar, MO 64759
877-302-8625

2 POLYGREEN FOAM PAD
SCALE: NTS

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VINCENT P. LATTANNER
2554
8.31.2017
Renewal Date
10.2.2015
Date

seal

consultant

CITY OF
SAUSALITO

owner

ROBIN SWEENY
PARK

APN 064-165-012

420 LITHO STREET
SAUSALITO, CA, 94965

project

no.	description	
1	PLANNING SUBMITTAL	02.01.2013
2	PLANNING SUBMITTAL	10.15.2013
3	PLANNING SUBMITTAL	07.29.2015
4	PERMIT SUBMITTAL	10.02.2015

key map

date 10.02.2015
scale AS SHOWN
project no. COS10-01

CONSTRUCTION
DETAILS

sheet title

L9.13

sheet no.

51 OF 58

BUILDING PERMIT SUBMITTAL

10/7/2015 12:15 PM