PHASE IB ARCHEOLOGICAL INVESTIGATION
Bloomingdale Park Athletic Field Improvements
Ramona Avenue and Lenevar Avenue
Borough of Staten Island
Richmond County, New York
HAA # 5238-11

Submitted to:
NYC Department of Parks and Recreation
The Olmsted Center, Flushing Meadows-Corona Park
117-02 Roosevelt Avenue
Flushing, NY 11368

Prepared by:
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May 2018
MANAGEMENT SUMMARY
Phase of Survey: Phase IB

LOCATION INFORMATION
Municipality: Staten Island
County: Richmond

SURVEY AREA
Northern Area (synthetic turf field):
Length: 330 feet
Width: 220 feet
Acres: 1.67 acres

Southern Area (natural turf field):
Length: 300 feet
Width: 215 feet
Acres: 1.48

RESULTS OF ARCHEOLOGICAL SURVEY
Number and Interval of Shovel Tests: 15 tests at 15-meter intervals
Number and Name of Precontact Sites Identified: None
Number and Name of Historic Sites Identified: None
Number and Name of Sites Recommended for Phase II or Avoidance: None

RECOMMENDATIONS
Hartgen recommends that the Project will have no impact upon historic properties. No further archeological investigation is warranted.

Report Authors: Justin DiVirgilio, Matthew J. Kirk
Date of Report: May 14, 2018
TABLE of CONTENTS

PHASE IB ARCHEOLOGICAL INVESTIGATION ................................................................. 1
1 Introduction .................................................................................................................... 1
2 Project Information ...................................................................................................... 1
   2.1 Project Location ..................................................................................................... 1
   2.2 Description of the Project .................................................................................... 1
   2.3 Description of the Area of Potential Effects (APE) ............................................. 1
3 Environmental Background ....................................................................................... 1
   3.1 Present Land Use and Current Conditions ....................................................... 1
   3.2 Soils ...................................................................................................................... 1
4 Documentary Research .............................................................................................. 2
   4.1 Archeological Sites ............................................................................................ 2
   4.2 Historic Properties ............................................................................................ 2
   4.3 Previous Surveys ............................................................................................... 2
5 Archeological Survey ................................................................................................ 3
   5.1 Methodology ...................................................................................................... 3
      5.1.1 Shovel Testing ............................................................................................ 3
      5.1.2 Artifacts and Laboratory .......................................................................... 3
   5.2 Results ............................................................................................................... 3
6 Recommendations ..................................................................................................... 4
7 Bibliography ............................................................................................................. 5

Maps
Photographs
Appendix 1: Shovel Test Records
Appendix 2: Artifact Inventory
Appendix 3: Site Plans

Map List
Map 1. Project Location (USGS 2015)
Map 2. Project Map (Esri Inc. 2018)

Photograph List
Photo 1. View northeast along a cut slope which is eroding on to the synthetic turf field. This area has no archeological potential due to disturbance caused by the cut.
Photo 2. View northeast of shovel tests being excavated along the top of the eroding slope. The soils were undisturbed in this area. However, no artifacts were encountered.
Photo 3. View southwest along the alignment of a proposed drainage system. The pink flags in the ground mark test locations. Tests revealed that the soils in this area were extensively disturbed when the field was constructed.

Table List
Table 1. Soils in Project Area ....................................................................................... 2
Table 2. Archeological sites within one mile (1.6 km) of the Project reported since the 2001 Milner Phase IA report ................................................................. 2
Table 3. Relevant previous surveys within or adjacent to the Project ....................... 3
PHASE IB ARCHEOLOGICAL INVESTIGATION

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) conducted a Phase IB archeological investigation for proposed athletic field improvements at Bloomingdale Park (Project) located in the Borough of Staten Island, Richmond County, New York. The New York City Landmarks Preservation Commission (LPC) will review the project as part of the City Environmental Quality Review (CEQR) process. The investigation was conducted according to the New York Archaeological Council’s Standards for Cultural Resource Investigations and the Curation of Archaeological Collections (1994) and the Landmarks Preservation Commissions Guidelines for Archaeological Work in New York City (2002).

2 Project Information

2.1 Project Location

The Project is located within the eastern half of Bloomingdale Park in the area bounded by Ramona Avenue, Lenevar Avenue, Drumgoole Road West, and Maguire Avenue. This area presently contains one synthetic turf soccer field, and two natural turf baseball fields surrounded by forested area (Map 1).

2.2 Description of the Project

The Project entails the in-kind replacement of the existing synthetic turf soccer field with a new synthetic turf soccer field (Map 2). Along the northwestern edge of this field, a retaining wall will be constructed where there is currently an eroding slope (approximately 275 linear feet).

The Project also entails the construction of a new synthetic turf multi-use field at the location of one of the existing natural turf baseball fields (Map 2). This field will receive a new drainage system consisting of an array of Advanedge field drains connected to 310 linear feet of collector drain pipes and a 110x20-foot storm chamber. The grade of this field is being raised such that the Advanedge field drains will be within the depth of existing disturbance. Appendix 1 contains site plans for the existing fields and the proposed Project.

2.3 Description of the Area of Potential Effects (APE)

The area of potential effects (APE) encompasses the two aforementioned athletic fields. The synthetic turf field is clearly within an area where the landform has been cut. The natural turf baseball field is nearer to the elevation of the adjacent wooded areas, but does contrast with the surrounding topography which is gently sloped.

3 Environmental Background

3.1 Present Land Use and Current Conditions

The Project Area is presently occupied by synthetic and natural turf athletic fields which were constructed circa 2006.

3.2 Soils

Soil surveys provide a general characterization of the types and depth of soils that are found in an area. The Boonton loam is likely representative of the soils that existed throughout the Project Area prior to construction of the existing athletic fields. The Greenbelt loam unit reflects modifications to the natural soil column caused by construction of the athletic fields.
### Table 1. Soils in Project Area

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Name</th>
<th>Depth</th>
<th>Textures</th>
<th>Slope</th>
<th>Drainage</th>
<th>Landform</th>
</tr>
</thead>
<tbody>
<tr>
<td>BtC</td>
<td>Boonton loam</td>
<td>0-20 cm [Ap] 20-38 cm [BA] 38-76 cm [Bt]</td>
<td>Br Si Lo Dk Y Br Fi Sa Lo Br Gv Lo</td>
<td>8-15%</td>
<td>Moderately to well drained</td>
<td>Uplands, till</td>
</tr>
<tr>
<td>GbA</td>
<td>Greenbelt loam</td>
<td>0-13 cm [A] 13-76 cm [Bw]</td>
<td>Dk Re Br Lo</td>
<td>0-3%</td>
<td>Well drained</td>
<td>Anthropogenic</td>
</tr>
</tbody>
</table>

**Key:**  
- **Color:** Br—Brown, Dk—Dark, Gr—Gray, Re—Red, Y—Yellow, Bk—Black, Ol—Olive  
- **Texture:** Co—Coarse, Fi—Fine, Gv—Gravelly, Lo—Loam, Sa—Sand, Si—Silt, Vy—Very

### 4 Documentary Research

Hartgen conducted research using the New York State Cultural Resource Information System (CRIS), which is maintained by the New York SHPO and the Division for Historic Preservation DHP within OPRHP. CRIS contains a comprehensive inventory of archeological sites, State and National Register (NR) properties, properties determined eligible for the NR (NRE), and previous cultural resource surveys.

#### 4.1 Archeological Sites

CRIS was examined to identify archeological sites that have been reported within one mile of the project since 2001 when John Milner Associates conducted their Phase IA study. An examination of CRIS identified four reported archeological sites within one mile (1.6 km) of the Project (Table 2). Previously reported archeological sites provide an overview of both the types of sites that may be present in the Project Area and relation of sites throughout the surrounding region.

#### Table 2. Archeological sites within one mile [1.6 km] of the Project reported since the 2001 Milner Phase IA report

<table>
<thead>
<tr>
<th>OPRHP Site No.</th>
<th>NYSM Site No.</th>
<th>Site Identifier</th>
<th>Description</th>
<th>Proximity to Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>08501.002767</td>
<td></td>
<td>Prehistoric Site A7-MCB-1</td>
<td>NRE; precontact workshop yielding debitage, hammerstones, fire-cracked rock, etc. and historical artifacts relating to a 19th century occupation of the site.</td>
<td>4,800 feet west</td>
</tr>
<tr>
<td>08501.002925</td>
<td></td>
<td>BMP Lemon Creek-16 precontact site</td>
<td>Precontact camp; total artifact assemblage from the Phase IB, II, and III include 103 lithic artifacts and 10 pottery sherds associated with the Middle Woodland time period.</td>
<td>3,300 feet southeast</td>
</tr>
<tr>
<td>08501.002970</td>
<td></td>
<td>Staudt Family Farm Site</td>
<td>NRE; Within the NRL Sandy Ground Archaeological Historic District; brick shaft features, a cistern and a well were uncovered along with artifacts dating to the 1920s and 1930s.</td>
<td>3,000 feet northwest</td>
</tr>
<tr>
<td>08501.003662</td>
<td></td>
<td>Rossville A. M. E. Zion Church Cemetery</td>
<td>NRL; Within the NRL Sandy Ground Archaeological Historic District; African American cemetery constructed in 1852</td>
<td>3,200 feet northwest</td>
</tr>
</tbody>
</table>

#### 4.2 Historic Properties

An examination of CRIS identified no NR properties, no NRE properties, no properties previously determined to be ineligible, and no properties of undetermined status within the Project Area. A review of the Landmark Preservation Commission website identified no individual landmarks or historic districts within the Project Area.

#### 4.3 Previous Surveys

A review of CRIS identified one previous surveys within the immediate vicinity of the Project (Table 3).
Table 3. Relevant previous surveys within or adjacent to the Project

<table>
<thead>
<tr>
<th>Project/Phase</th>
<th>Summary</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomingdale Park, Phase IA</td>
<td>Recommended testing for developments within the park based on the proximity of four known precontact archeological sites, and an inlet with a large wetland. There are no historical map-documented structures nearby, so the historic sensitivity was considered low.</td>
<td>(John Milner Associates 2001)</td>
</tr>
</tbody>
</table>

5 Archeological Survey

While John Milner Associate had recommended testing in 2001, no Phase IB survey was conducted prior to construction of the athletic fields beginning in about 2004. While construction of the existing athletic fields reduced the potential for intact archeological deposits, the possibility existed that a buried topsoil horizon might exist within the natural turf baseball field. For this reason, the NYC Department of Parks and Recreation requested this Phase IB survey be conducted.

5.1 Methodology

5.1.1 Shovel Testing

Shovel tests were excavated at an interval of 15 meters (50 ft). Each shovel test was 40 centimeters (16 in) in diameter. All excavated soil from in situ soil strata was passed through 0.25-inch hardware mesh when feasible and examined for precontact (Native American) and historic artifacts. Fill soils were not screened. The stratigraphy of each test was recorded including the depth, soil description, and artifact content. The location of each shovel test was mapped using a Trimble R1 GPS unit. Representative test excavations were photographed.

5.1.2 Artifacts and Laboratory

As general procedure, all precontact (Native American) cultural material identified during fieldwork are collected. Significant historic artifacts such as glass, ceramics, food remains, hardware, and miscellaneous items are collected. Coal, ash, cinder, brick, and modern materials are noted. Any artifacts collected are placed in paper or plastic bags labeled by provenience and inventoried in a bag list. Bags are numbered in the field and transported to the Hartgen laboratory in the Town of North Greenbush, Rensselaer County, New York, for processing.

Shovel test records and other provenience information were entered into a Microsoft Access database (Appendix 1). Artifacts were cleaned and cataloged. Cataloging entailed entering artifact provenience information, counts, weights, and descriptive information into the database (Appendix 2).

5.2 Results

Fourteen shovel tests were excavated in two areas. Tests 1-5 were excavated along the northern edge of the existing synthetic turf field at the top of an eroding slope (Photos 1-2). These tests were placed in locations set back from the eroded edge where the potential to encounter intact soils appeared highest. The stratigraphy was natural and consisted of a shallow (6-12 cm), dark, loamy topsoil about a reddish brown, gravelly loam subsoil. There was no plowzone. No artifacts were encountered.

Tests 6-14 were placed within an existing natural turf baseball field along the alignment of proposed collector lines (Photo 3). These tests encountered highly heterogeneous soil compositions. Tests 6, 7, 10, and 11 contained an upper level of dark brown fill bearing a mix of historic and modern artifacts. Tests 8 and 9 contained a deep sand fill selected to improve infield drainage. Tests 12 and 13 contained a pea gravel fill. The subsoil was similar to that found in Tests 1-5, a dark reddish brown, gravelly loam. No precontact artifacts were recovered. The only historic period artifacts were recovered from fill strata.
6 Recommendations

Hartgen recommends that the Project will have no impact upon historic properties. No further archeological investigation is warranted.
7 Bibliography

Esri Inc.

John Milner Associates, Inc.

Landmarks Preservation Commission

New York Archaeological Council (NYAC)

United States Geological Survey (USGS)
Maps
Project Area

Drumgoole Rd

Project Location
(ESRI 2018; USGS 2015)

Raritan Bay

Note: Contour interval is 10 feet.
Photographs
Photo 1. View northeast along a cut slope which is eroding on to the synthetic turf field. This area has no archeological potential due to disturbance caused by the cut.

Photo 2. View northeast of shovel tests being excavated along the top of the eroding slope. The soils were undisturbed in this area. However, no artifacts were encountered.
Photo 3. View southwest along the alignment of a proposed drainage system. The pink flags in the ground mark test locations. Tests revealed that the soils in this area were extensively disturbed when the field was constructed.
Appendix 1: Shovel Test Records
<table>
<thead>
<tr>
<th>Ending Depth (cm)</th>
<th>Level</th>
<th>Soil Type</th>
<th>Soil Inclusions</th>
<th>Munsell Color</th>
<th>Termination Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>other (organic)</td>
<td></td>
<td>10yr 2/1 black</td>
<td>subsoil</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>clay</td>
<td></td>
<td>5yr 4/4 reddish brown</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>loam</td>
<td></td>
<td>10yr 3/2 very dark grayish brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>loam</td>
<td></td>
<td>5yr 4/6 yellowish red</td>
<td>subsoil</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>loam</td>
<td>gravel</td>
<td>10yr 3/2 very dark grayish brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>loam</td>
<td>gravel</td>
<td>5yr 4/6 yellowish red</td>
<td>subsoil</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>other (organic)</td>
<td></td>
<td>10yr 2/1 black</td>
<td>subsoil</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>sand clay</td>
<td></td>
<td>5yr 4/4 reddish brown</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>other (organic)</td>
<td></td>
<td>10yr 2/1 black</td>
<td>subsoil</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>sand clay</td>
<td></td>
<td>5yr 4/4 reddish brown</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>sand loam</td>
<td></td>
<td>10yr 3/4 dark yellowish brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>silt loam</td>
<td>gravel</td>
<td>2.5yr 4/8 dark red</td>
<td>subsoil</td>
</tr>
<tr>
<td>7</td>
<td>22</td>
<td>sand loam</td>
<td></td>
<td>7.5yr 2.5/2 very dark brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>62</td>
<td>silt clay</td>
<td></td>
<td>7.5yr 4/6 strong brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>sand clay</td>
<td></td>
<td>5yr 4/4 reddish brown</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>sand</td>
<td></td>
<td>10yr 5/8 yellowish brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>loam clay</td>
<td>gravel</td>
<td>10yr 3/2 very dark grayish brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>loam clay</td>
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<td>5yr 4/6 yellowish red</td>
<td>other (compaction)</td>
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<tr>
<td>9</td>
<td>29</td>
<td>sand</td>
<td></td>
<td>10yr 5/8 yellowish brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>loam clay</td>
<td>gravel</td>
<td>5yr 4/6 yellowish red</td>
<td>impasse (rocks)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10YR 2/1 black</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>23</td>
<td>sand clay</td>
<td></td>
<td>7.5yr 3/3 dark brown</td>
<td>impasse (compact soil)</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>clay</td>
<td></td>
<td>7.5yr 4/6 strong brown</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>15</td>
<td>sand clay</td>
<td>gravel</td>
<td>5yr 3/3 dark reddish brown</td>
<td>impasse (compact soil)</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>clay</td>
<td></td>
<td>2.5yr 4/6 dark red</td>
<td>impasse (compact soil)</td>
</tr>
<tr>
<td>Ending Depth (cm)</td>
<td>Level</td>
<td>Soil Type</td>
<td>Soil Inclusions</td>
<td>Munsell Color</td>
<td>Termination Reason</td>
</tr>
<tr>
<td>------------------</td>
<td>-------</td>
<td>--------------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>sand</td>
<td></td>
<td>10yr 5/6 yellowish brown</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>2</td>
<td>loam clay</td>
<td>gravel</td>
<td>7.5yr 3/4 dark brown</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>3</td>
<td>loam</td>
<td>gravel</td>
<td>5yr 3/4 dark reddish brown subsoil</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>sand</td>
<td></td>
<td>10yr 5/6 yellowish brown</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>2</td>
<td>loam clay</td>
<td>gravel</td>
<td>7.5yr 3/4 dark brown</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>3</td>
<td>loam clay</td>
<td>gravel</td>
<td>5yr 3/4 dark reddish brown subsoil</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>loam</td>
<td></td>
<td>10yr 3/2 very dark grayish brown</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>2</td>
<td>loam</td>
<td>gravel</td>
<td>5yr 4/6 yellowish red subsoil</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2: Artifact Inventory
<table>
<thead>
<tr>
<th>Provenience</th>
<th>Level</th>
<th>Feature</th>
<th>Bag</th>
<th>Item</th>
<th>Count</th>
<th>Artifact Description</th>
<th>Material</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP 6</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>vessel</td>
<td>glass</td>
<td>1.8</td>
</tr>
<tr>
<td>STP 6</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>window</td>
<td>glass</td>
<td>1.2</td>
</tr>
<tr>
<td>STP 6</td>
<td>1</td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>mineral sample</td>
<td>quartz</td>
<td>2.6</td>
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<tr>
<td>STP 6</td>
<td>1</td>
<td></td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>mineral sample</td>
<td>unidentified stone</td>
<td>0.6</td>
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<tr>
<td>STP 6</td>
<td>1</td>
<td></td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>plastic</td>
<td>plastic</td>
<td>0.0</td>
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<tr>
<td>STP 7</td>
<td>1</td>
<td></td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>bottle</td>
<td>glass</td>
<td>8.8</td>
</tr>
<tr>
<td>STP 10</td>
<td>1</td>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>buff bodied</td>
<td>coarse earthenware</td>
<td>1.2</td>
</tr>
<tr>
<td>STP 10</td>
<td>1</td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>unidentified</td>
<td>glass</td>
<td>1.2</td>
</tr>
<tr>
<td>STP 10</td>
<td>1</td>
<td></td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>slag</td>
<td>iron alloy</td>
<td>1.4</td>
</tr>
<tr>
<td>STP 10</td>
<td>2</td>
<td></td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>black-glazed redware</td>
<td>refined earthenware</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Appendix 3: Site Plans
TERRACED RETAINING WALL

RECONSTRUCT SYNTHETIC TURF SOCCER FIELD

NEW MULTI-USE SYNTHETIC TURF FIELD. APPROXIMATE SIZE 300'X160'. CURRENTLY THERE IS A NATURAL TURF BASEBALL FIELD IN THIS LOCATION.
THE CONTRACTOR SHALL BE AWARE THAT THE STONE SEATS ITEM & STONE BLOCK SCRAMBLE ITEMS REQUIRE AN EXTENDED LEAD TIME. TO AVOID DELAY IN THE PROJECT, THE CONTRACTOR SHALL PROVIDE CERTIFICABLE RECEIPTS, DOCUMENTING HIGHER ACTION ON OBTAINING THESE ITEMS, WITHIN 10 DAYS OF THE ORDER TO WORK DATE.

NOTE: CONCRETE FORM LINER TO BE FITZGERALD PATTERN 1806L, LARGE RUSTIC PLANT GRAY LAVASTONE 8" WIDE OR APPROVED EQUAL. PROVIDE EXPANSION JOINTS AT 1800 C. AFTER EVERY TWO (2) FORM LINER PANELS.

**KEY PLAN**

CITY OF NEW YORK
PARKS & RECREATION
FLUSHING MEADOWS COUNTRY PARK
FLUSHING, NEW YORK 11375

ENGINEERING

ENLARGEMENT PLAN & DETAILS - SCRAMBLE 1

DESIGNER: G. VAN GARDEN
VISION: G. VAN GARDEN
INCH/METRIC: G. HELLER

SHEET NO. 21 OF 30 SHEETS

L301-00

8/19/2007