

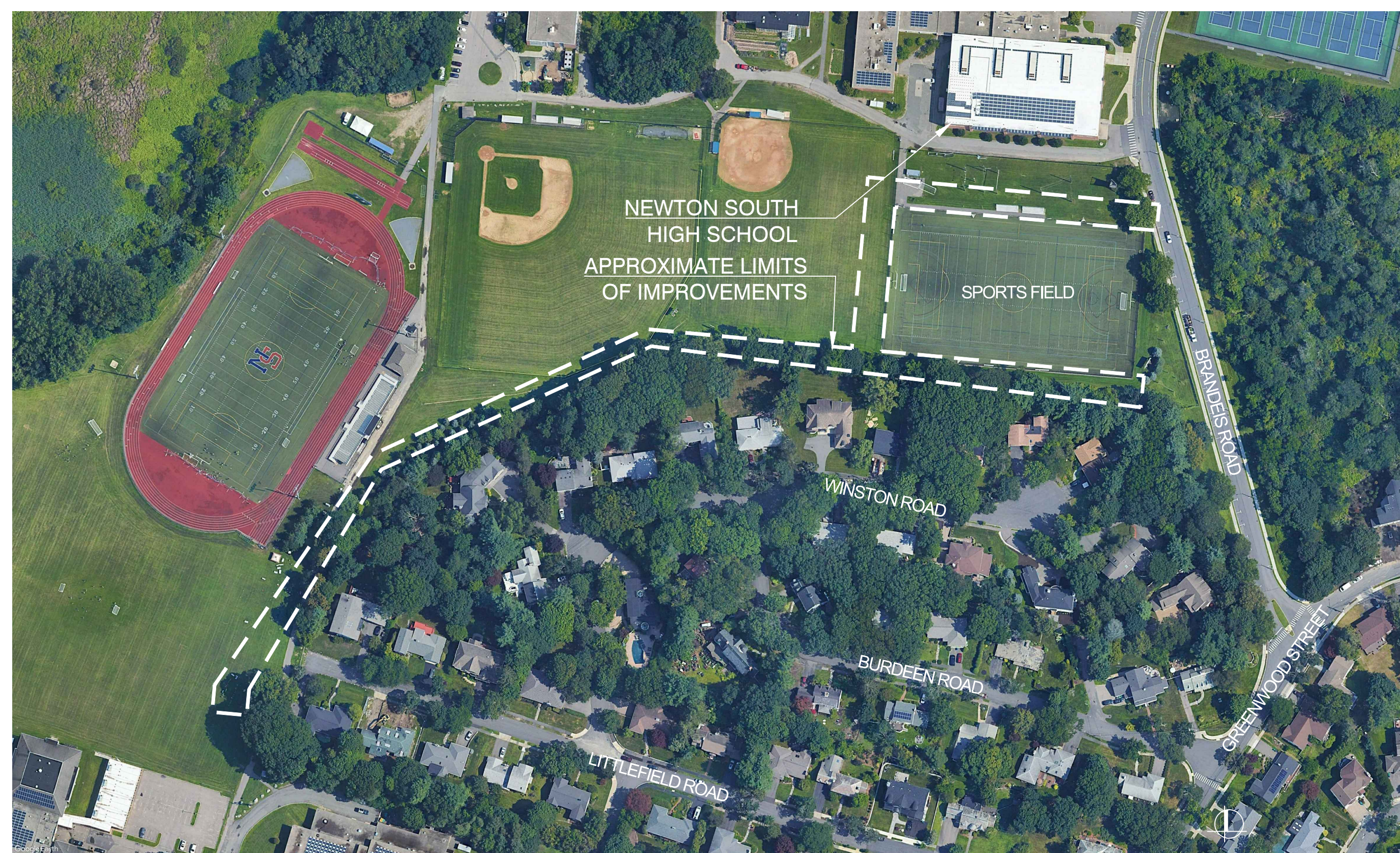
CITY OF NEWTON

NEW SPORTS LIGHTING AT BRANDEIS ROAD FIELD, NEWTON SOUTH HIGH SCHOOL

140 BRANDEIS ROAD, NEWTON MA, 02459
PROJECT #22-21 / CONTRACT #L-6865

CITY OF NEWTON, MASSACHUSETTS
Ruthanne Fuller, Mayor

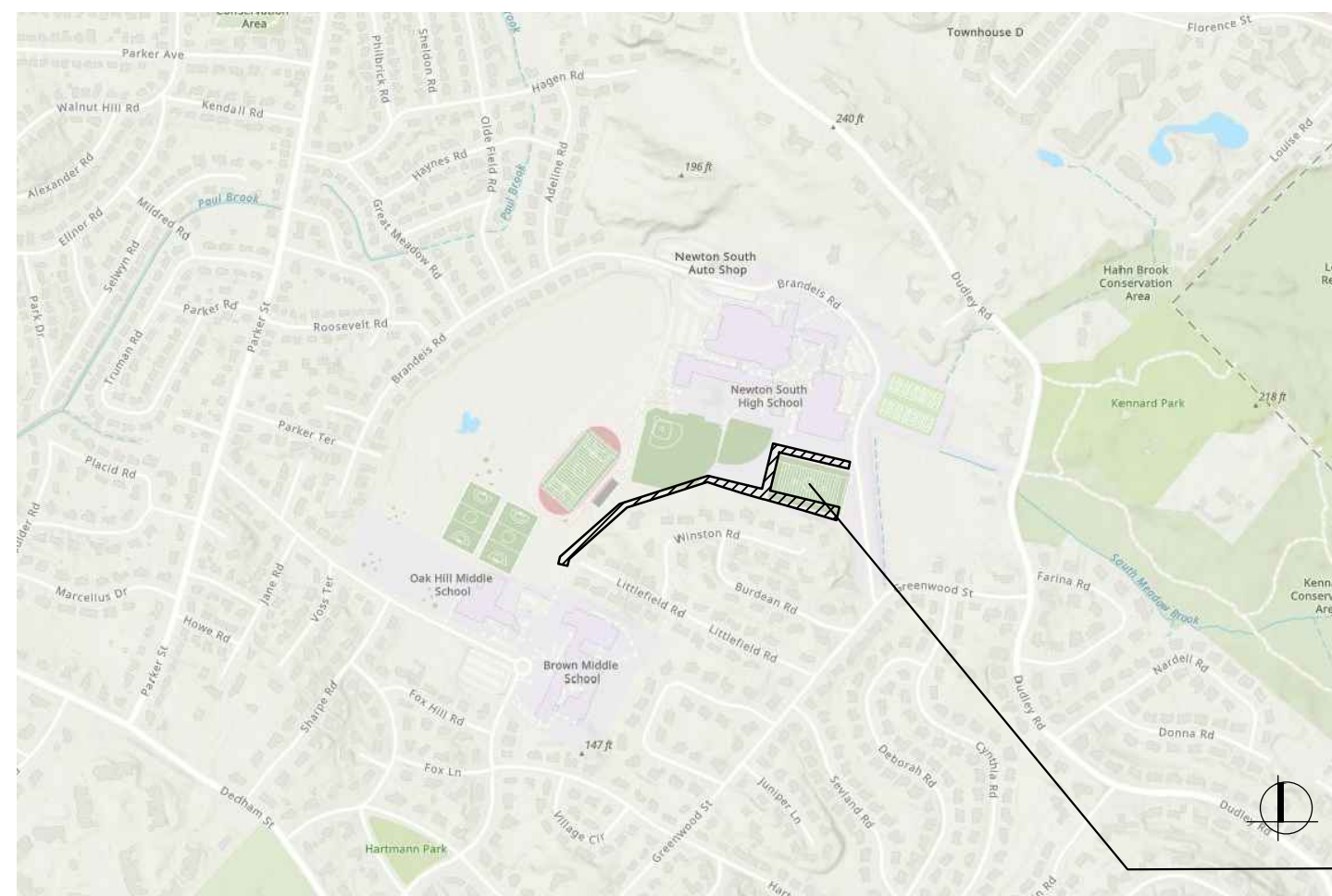
Nicole Banks, Commissioner
Newton Parks, Recreation, and Culture Department
246 Dudley Road
Newton, MA, 02459



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L500	SITE CONSTRUCTION DETAILS

Locus Map



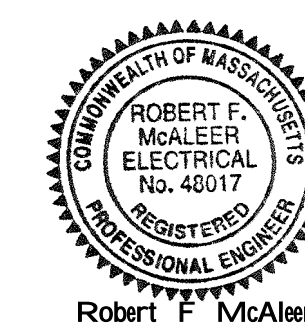
BRANDEIS ROAD FIELD
NEWTON SOUTH HIGH SCHOOL SPORTS FIELD
APPROXIMATE PROJECT AREA

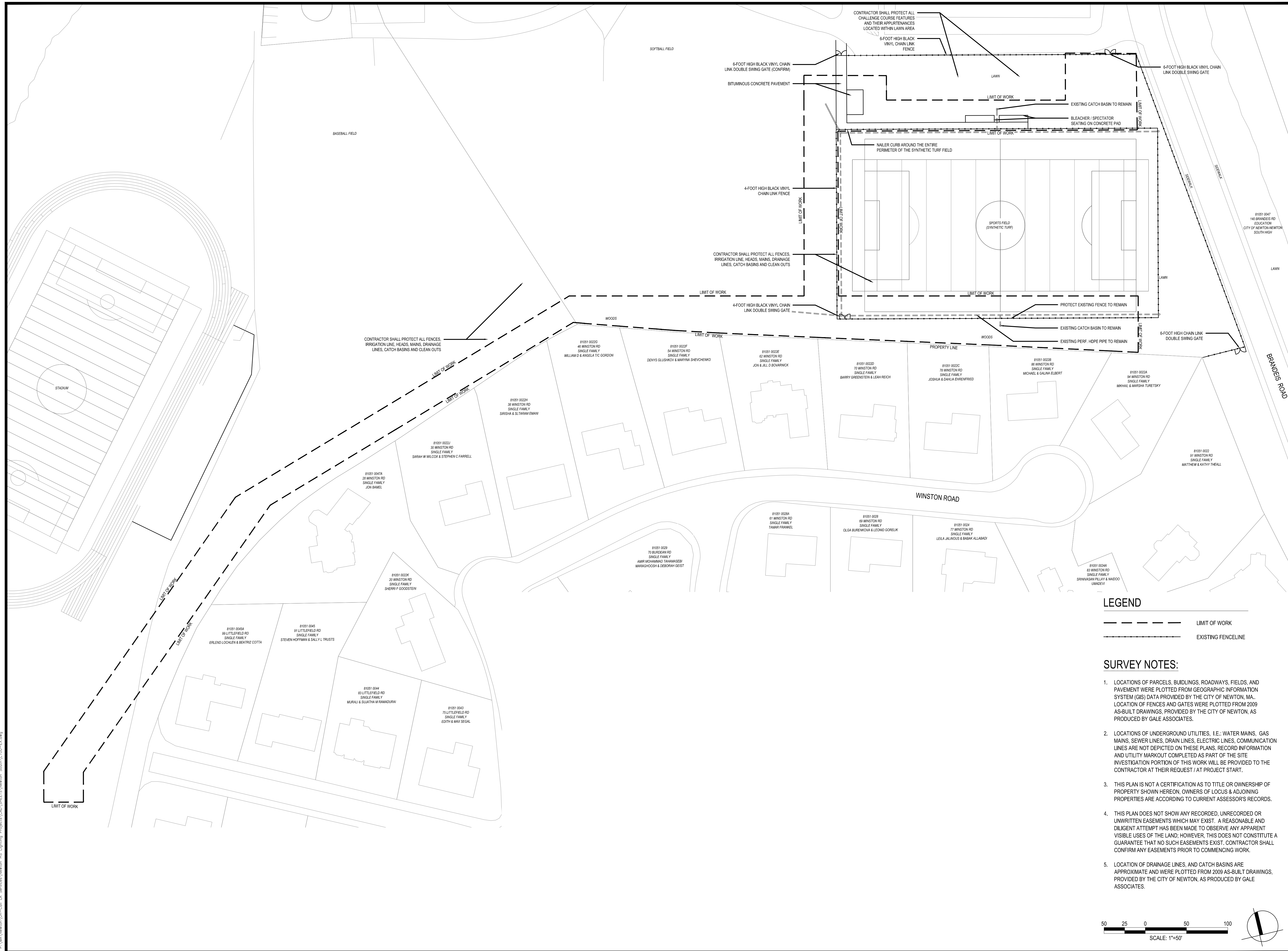
BID DOCUMENTS

MAY 19, 2022

Prepared By
Weston & SampsonSM

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Consultants:

Revisions:

No.	Date	Description



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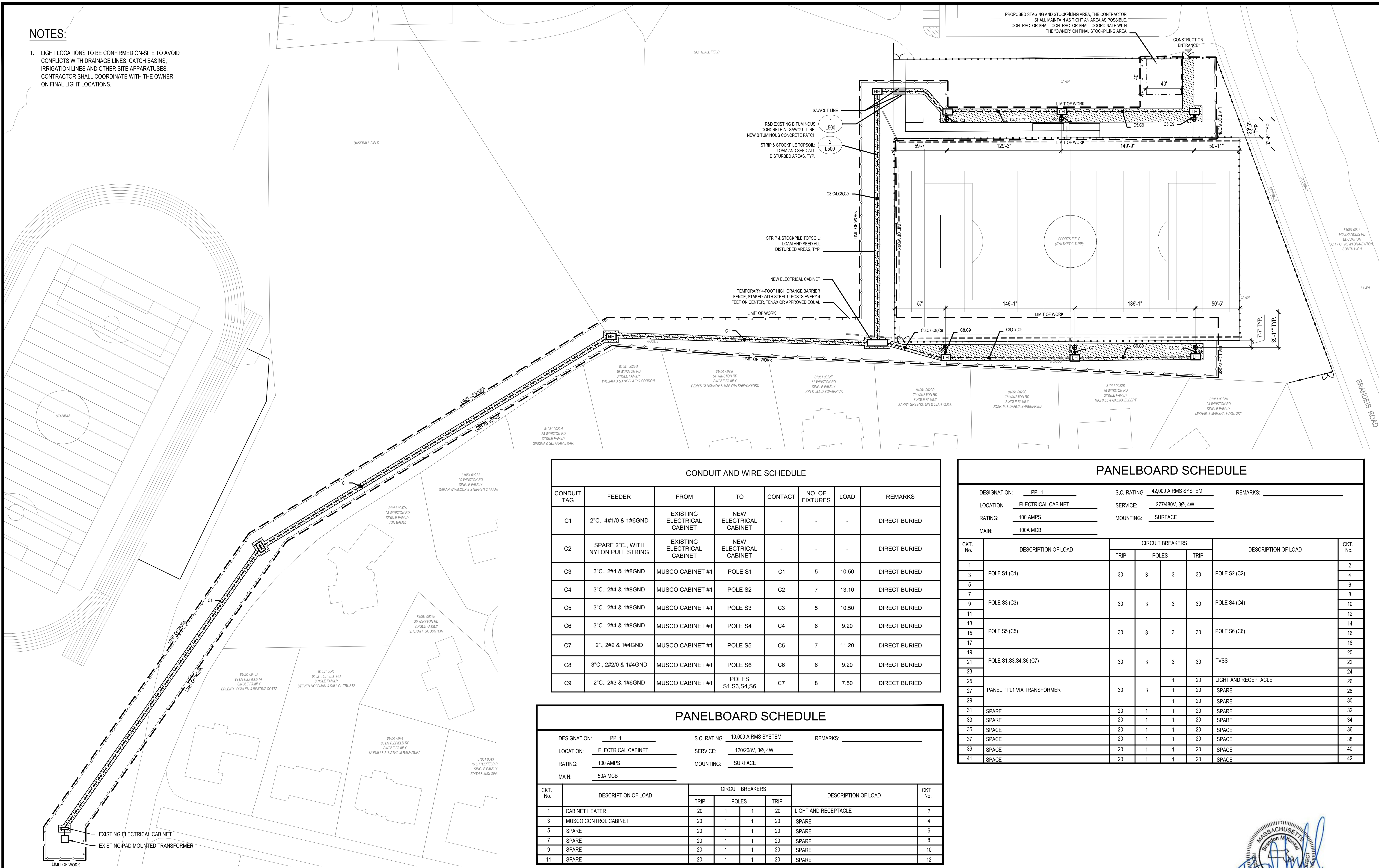
**EXISTING
 CONDITIONS PLAN**

Sheet Number:

L100

NOTES:

1. LIGHT LOCATIONS TO BE CONFIRMED ON-SITE TO AVOID CONFLICTS WITH DRAINAGE LINES, CATCH BASINS, IRRIGATION LINES AND OTHER SITE APPARATUS. CONTRACTOR SHALL COORDINATE WITH THE OWNER ON FINAL LIGHT LOCATIONS.



CONDUIT AND WIRE SCHEDULE

CONDUIT TAG	FEEDER	FROM	TO	CONTACT	NO. OF FIXTURES	LOAD	REMARKS
C1	2" C., 4#1/0 & 1#6GND	EXISTING ELECTRICAL CABINET	NEW ELECTRICAL CABINET	-	-	-	DIRECT BURIED
C2	SPARE 2" C., WITH NYLON PULL STRING	EXISTING ELECTRICAL CABINET	NEW ELECTRICAL CABINET	-	-	-	DIRECT BURIED
C3	3" C., 2#4 & 1#6GND	MUSCO CABINET #1	POLE S1	C1	5	10.50	DIRECT BURIED
C4	3" C., 2#4 & 1#6GND	MUSCO CABINET #1	POLE S2	C2	7	13.10	DIRECT BURIED
C5	3" C., 2#4 & 1#6GND	MUSCO CABINET #1	POLE S3	C3	5	10.50	DIRECT BURIED
C6	3" C., 2#4 & 1#6GND	MUSCO CABINET #1	POLE S4	C4	6	9.20	DIRECT BURIED
C7	2" C., 2#2 & 1#4GND	MUSCO CABINET #1	POLE S5	C5	7	11.20	DIRECT BURIED
C8	3" C., 2#2/0 & 1#4GND	MUSCO CABINET #1	POLE S6	C6	6	9.20	DIRECT BURIED
C9	2" C., 2#3 & 1#6GND	MUSCO CABINET #1	POLES S1, S3, S4, S6	C7	8	7.50	DIRECT BURIED

PANELBOARD SCHEDULE

DESIGNATION: PPL1 S.C. RATING: 10,000 A RMS SYSTEM REMARKS: _____
 LOCATION: ELECTRICAL CABINET SERVICE: 120/208V, 3Ø, 4W
 RATING: 100 AMPS MOUNTING: SURFACE
 MAIN: 50A MCB

CKT. No.	DESCRIPTION OF LOAD	CIRCUIT BREAKERS			DESCRIPTION OF LOAD	CKT. No.
		TRIP	POLES	TRIP		
1	CABINET HEATER	20	1	1	20	LIGHT AND RECEPTACLE
3	MUSCO CONTROL CABINET	20	1	1	20	SPARE
5	SPARE	20	1	1	20	SPARE
7	SPARE	20	1	1	20	SPARE
9	SPARE	20	1	1	20	SPARE
11	SPARE	20	1	1	20	SPARE

PANELBOARD SCHEDULE

DESIGNATION: PPH1 S.C. RATING: 42,000 A RMS SYSTEM REMARKS: _____
 LOCATION: ELECTRICAL CABINET SERVICE: 277/480V, 3Ø, 4W
 RATING: 100 AMPS MOUNTING: SURFACE
 MAIN: 100A MCB

CKT. No.	DESCRIPTION OF LOAD	CIRCUIT BREAKERS			DESCRIPTION OF LOAD	CKT. No.
		TRIP	POLES	TRIP		
1	POLE S1 (C1)	30	3	3	30	POLE S2 (C2)
3	POLE S2 (C2)	30	3	3	30	POLE S3 (C3)
5	POLE S3 (C3)	30	3	3	30	POLE S4 (C4)
7	POLE S4 (C4)	30	3	3	30	POLE S5 (C5)
9	POLE S5 (C5)	30	3	3	30	POLE S6 (C6)
11	POLE S6 (C6)	30	3	3	30	TVSS
13	POLE S1, S3, S4, S6 (C7)	30	3	3	30	TVSS
15	POLE S1, S3, S4, S6 (C7)	30	3	3	30	TVSS
17	POLE S1, S3, S4, S6 (C7)	30	3	3	30	TVSS
19	POLE S1, S3, S4, S6 (C7)	30	3	3	30	TVSS
21	POLE S1, S3, S4, S6 (C7)	30	3	3	30	TVSS
23	POLE S1, S3, S4, S6 (C7)	30	3	3	30	TVSS
25	PANEL PPL1 VIA TRANSFORMER	30	3	3	30	TVSS
27	PANEL PPL1 VIA TRANSFORMER	30	3	3	30	TVSS
29	PANEL PPL1 VIA TRANSFORMER	30	3	3	30	TVSS
31	SPARE	20	1	1	20	SPARE
33	SPARE	20	1	1	20	SPARE
35	SPARE	20	1	1	20	SPARE
37	SPARE	20	1	1	20	SPARE
39	SPARE	20	1	1	20	SPARE
41	SPARE	20	1	1	20	SPARE

Project:
IMPROVEMENTS TO NEWTON HIGH SCHOOLS LIGHTING

NEWTON
Parks & Recreation
NEWTON, MA

Weston & Sampson
 85 Devonshire Street, 3rd Floor,
 Boston, MA 02109
 617-412-4480 800.SAMPSON
 www.westonandsampson.com

Consultants:

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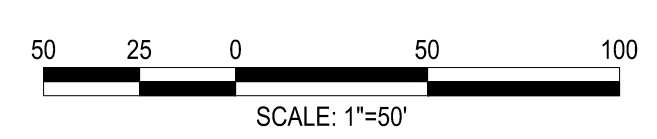
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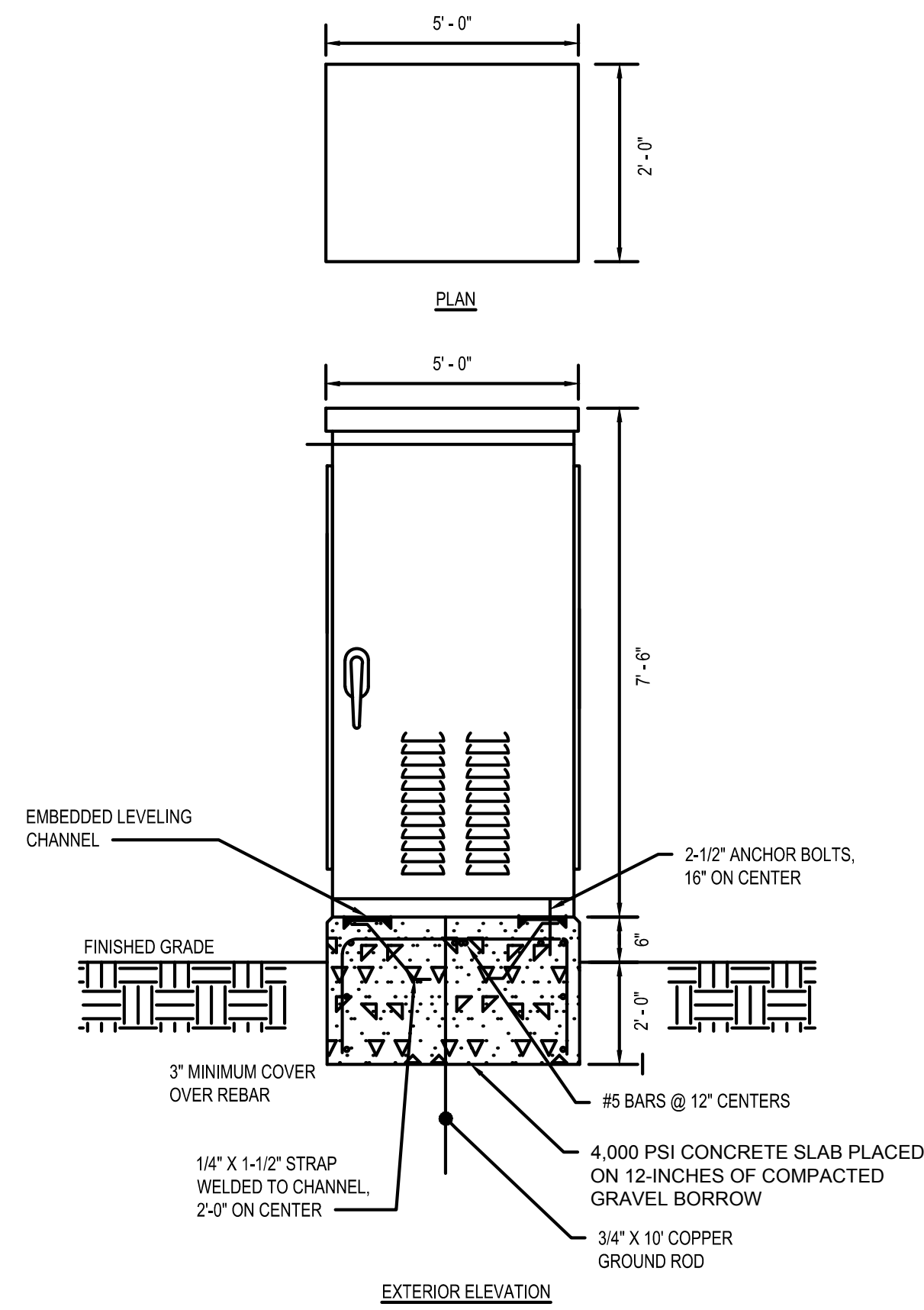
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SITE PLAN
 Sheet Number:
E100



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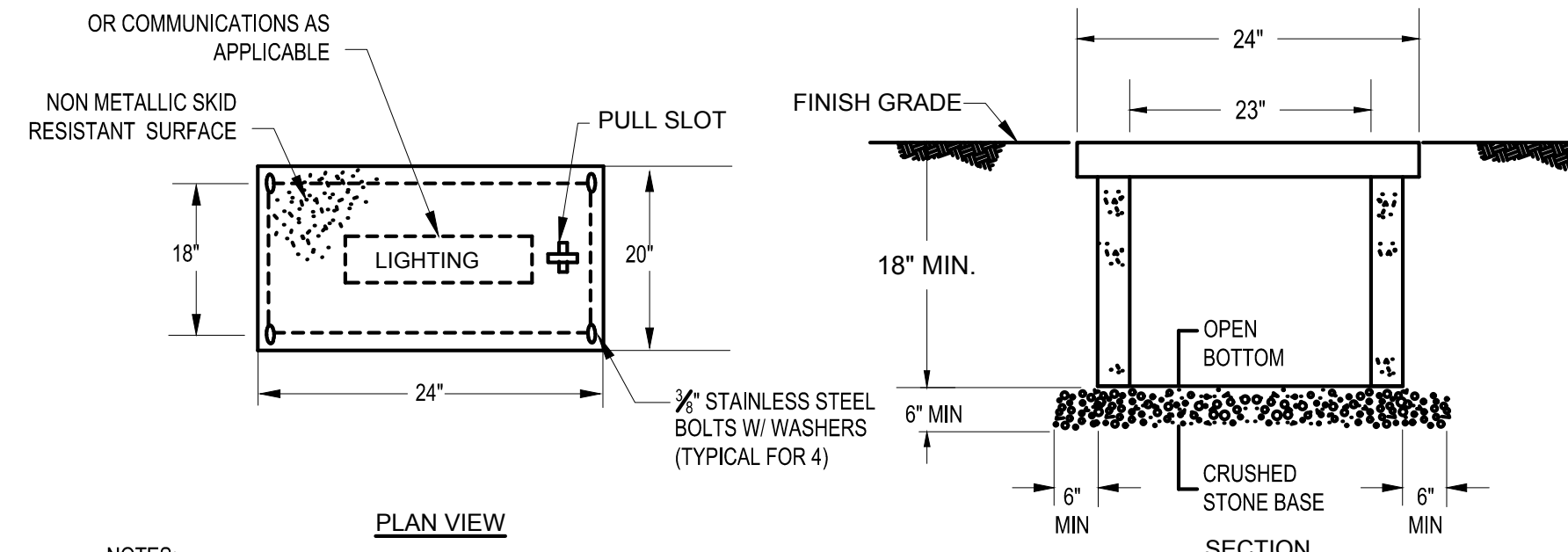


NOTES:

- CONTRACTOR SHALL COORDINATE WITH THE EXACT CABINET SIZE WITH ALL MANUFACTURER EQUIPMENT SIZES PRIOR TO SUBMITTING THE CABINET FOR APPROVAL. PROVIDE A SCALED DRAWING SHOWING ALL EQUIPMENT.

1 PAD MOUNTED NEMA 4X ELECTRICAL CABINET DETAIL

SCALE: NTS

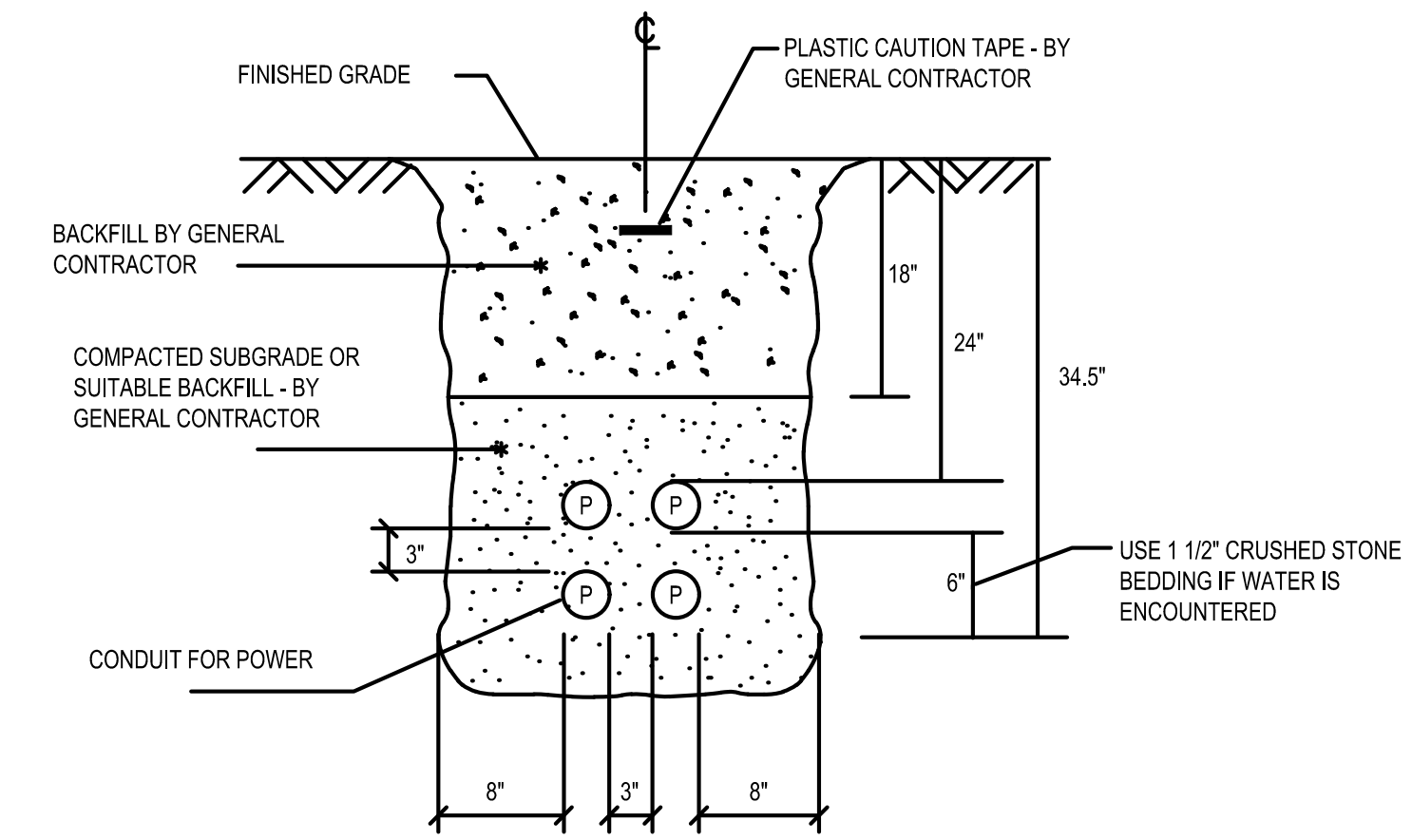


NOTES:

- THIS HANDHOLE IS INTENDED FOR NON-DELIBERATE VEHICULAR TRAFFIC ONLY.
- HANDHOLE SHALL BE PREFABRICATED POLYMER CONCRETE AGGREGATE EQUAL TO QUAZITE OR EQUAL PRE CAST CONCRETE CONSTRUCTION.
- HANDHOLE DIMENSION ARE SHOWN FOR REFERENCE ONLY AND SIZE INDICATED IS MINIMUM. EXACT HANDHOLE SIZES SHALL BE BY THE CONTRACTOR.

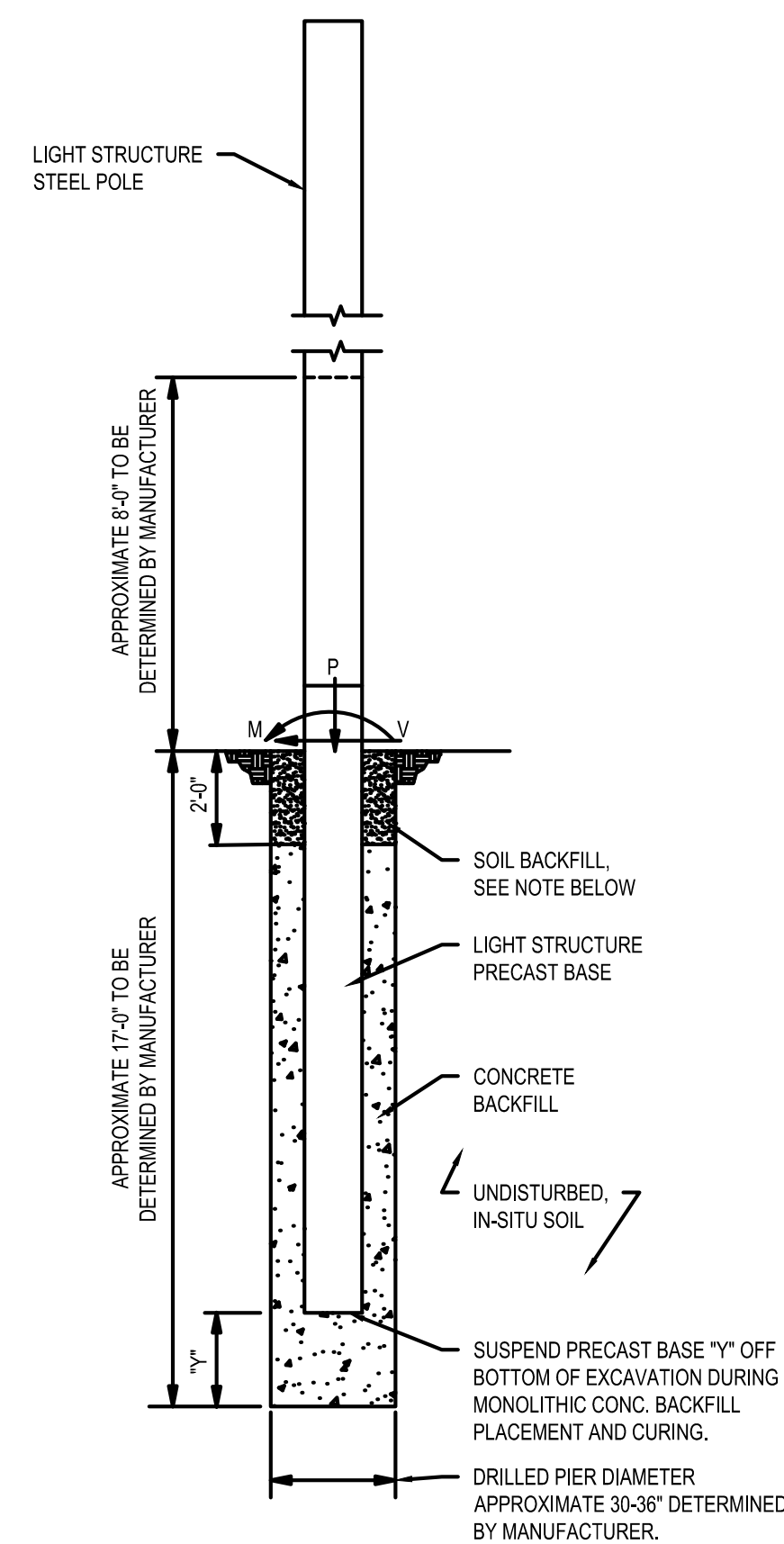
2 PREFABRICATED HANDHOLE "LH" & "CH" DETAIL

SCALE: NTS



3 TYPICAL DIRECT BURIED MULTIPLE CONDUIT DETAIL

SCALE: NTS



SOIL BACKFILL NOTE:

THE TOP TWO FEET OF ANNULUS SHALL BE BACKFILLED WITH SOIL, WITH A CLASSIFICATION OF CLASS 5 (TABLE 1806.2) OR BETTER, COMPACTION, 95% FOR COHESIVE SOIL AND 98% FOR A COHESIONLESS SOIL BASED UPON STANDARD PROCTOR TESTING (ASTM D698).

4 MUSCO POLE FOUNDATION ELEVATION DETAIL

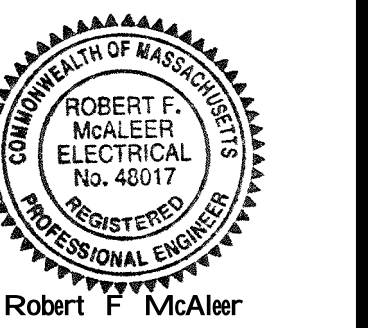
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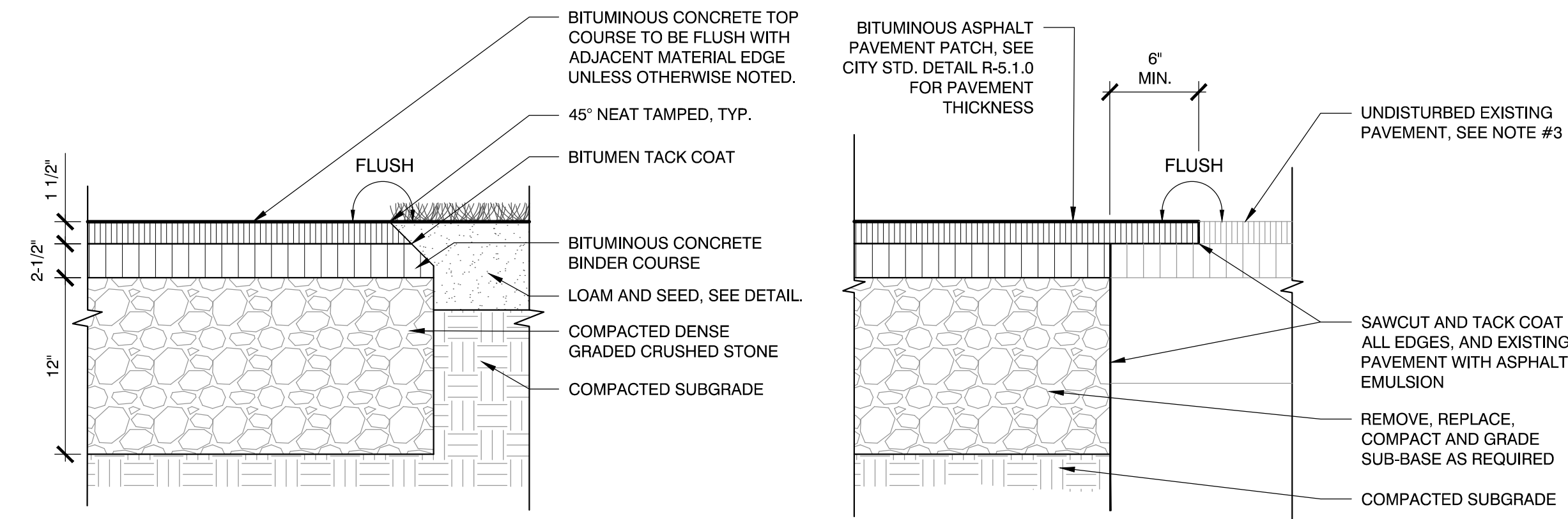
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**ELECTRICAL
DETAILS**

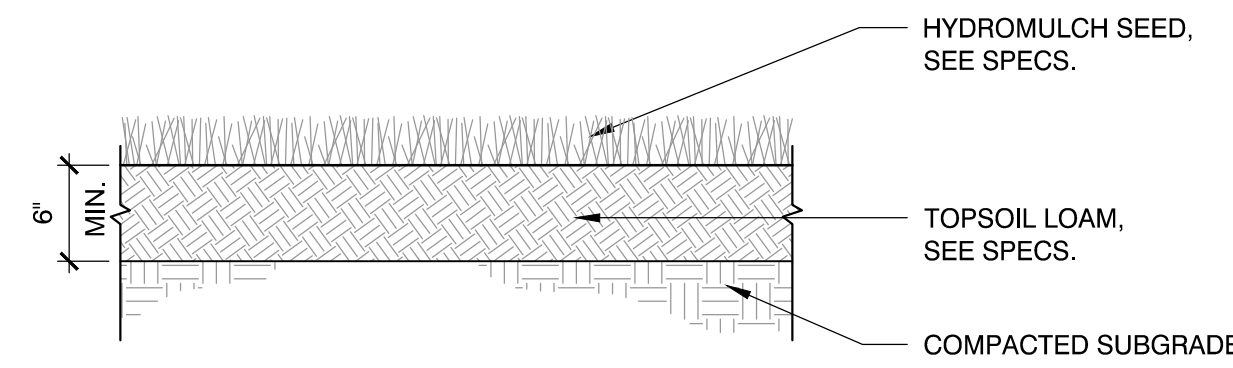
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NOTE:
 1. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES (E.G. EXISTING BITUMINOUS CONCRETE PAVEMENT AND NAILER CURB). AT EXISTING PAVEMENT SURFACES, SURFACE SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. PROVIDE INFRARED TREATMENT AT ALL EDGES BETWEEN NEW AND EXISTING PAVEMENT.
 2. ANY WORK REQUIRED BUT NOT SHOWN ON THE PLANS OR IN THE SPECS, SHALL CONFORM TO THE LATEST MASSDOT SPECIFICATIONS; SUBSECTION 460 HOT MIX ASPHALT FOR LOCAL STREETS.

1 NEW BITUMINOUS CONCRETE PATCH - TWO CONDITIONS
 SCALE: N.T.S.



2 LOAM AND SEED
 SCALE: N.T.S.

Consultants:

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Drawing Title:
**SITE
 CONSTRUCTION
 DETAILS**

Sheet Number:
L500