

# ANN ARBOR PUBLIC SCHOOLS PRESCHOOL PLAYGROUND IMPROVEMENTS

ANN ARBOR, MICHIGAN

EGLE PERMIT APPLICATION DRAWINGS  
OCTOBER, 2021

PREPARED BY:



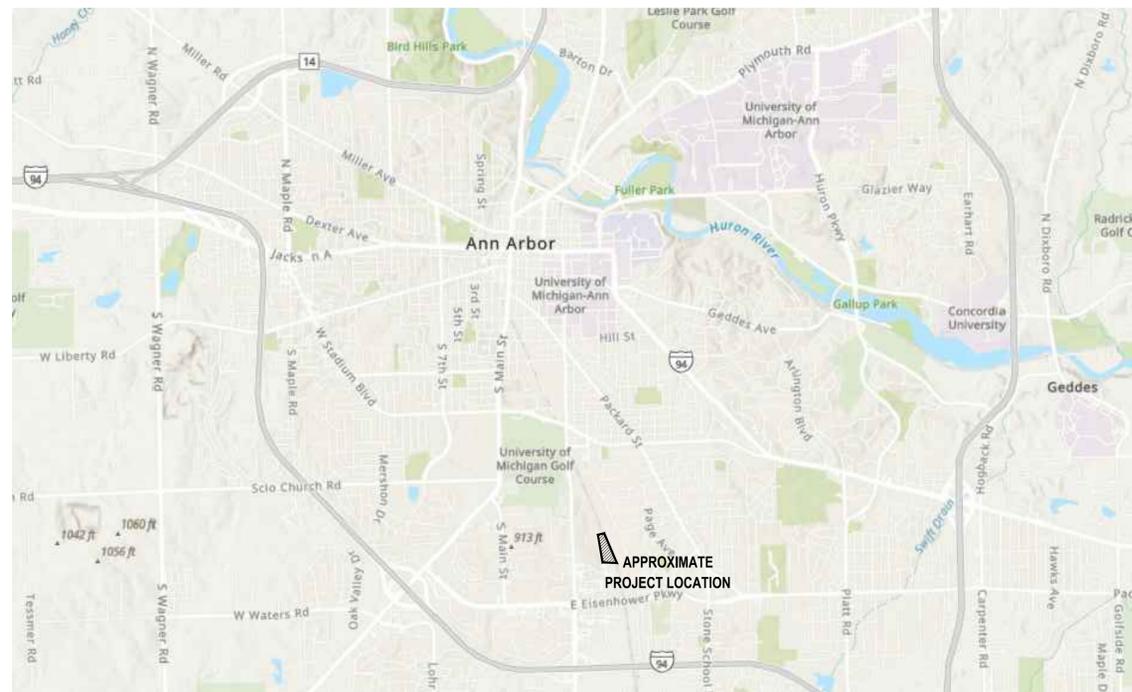
**Environmental Consulting & Technology, Inc.**  
2200 Commonwealth Boulevard, Suite 300  
Ann Arbor, Michigan 48105  
734.769.3004  
www.ectinc.com

APPLICANT:

ANN ARBOR PUBLIC SCHOOLS  
2555 SOUTH STATE STREET  
ANN ARBOR, MICHIGAN 48104

**DRAWING INDEX**

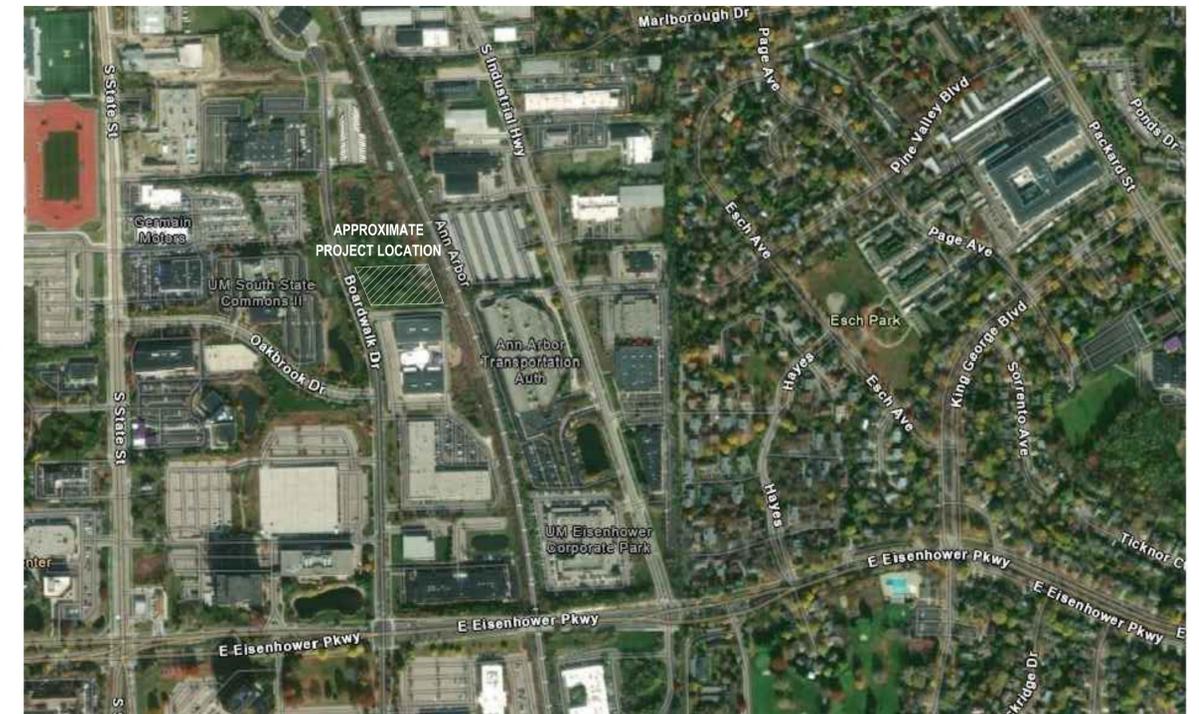
1. COVER
2. SURVEY 1
3. SURVEY 2
4. SITE PREPARATION & SESC
5. GRADING PLAN
6. SITE PLAN AND OVERALL IMPACTS
7. LAYOUT PLAN
8. DETAILS
9. DETAILS
10. DETAILS
11. WETLAND IMPACT AND CULVERT CROSS SECTIONS



PROJECT VICINITY MAP  
NOT TO SCALE

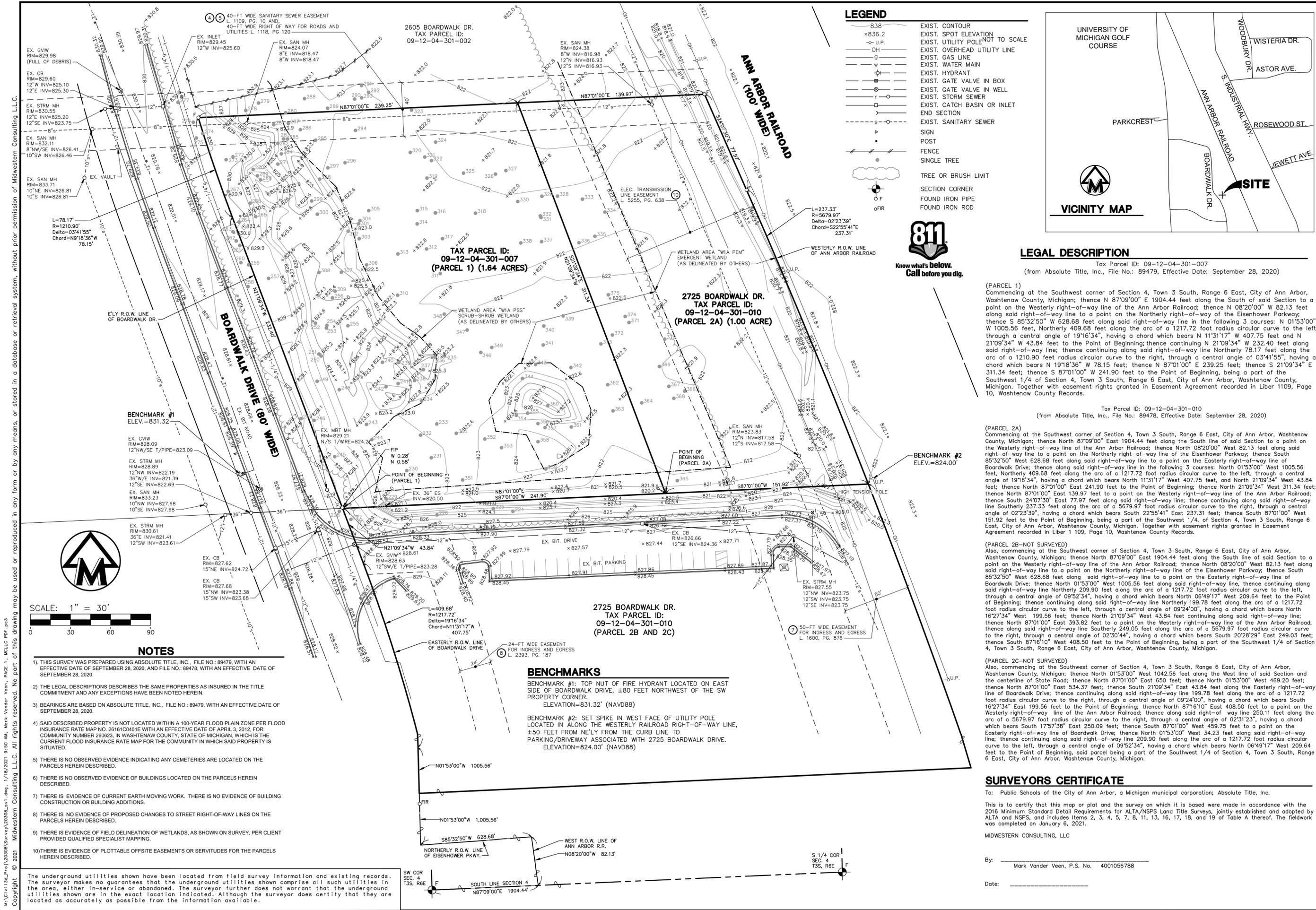


WASHTENAW COUNTY, MI  
NOT TO SCALE



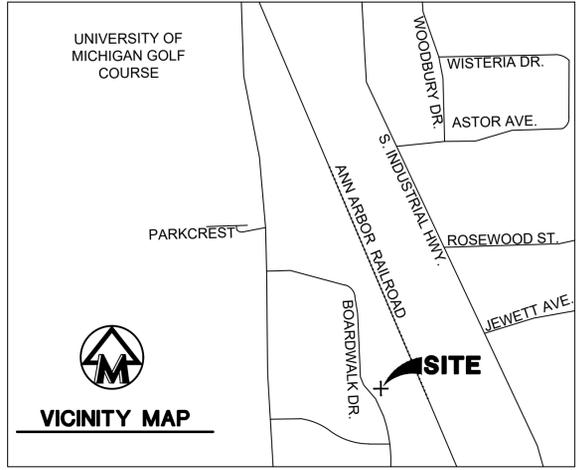
DETAILED VICINITY MAP  
NOT TO SCALE





**LEGEND**

838	EXIST. CONTOUR
x836.2	EXIST. SPOT ELEVATION
o-u.p.	EXIST. UTILITY POLE NOT TO SCALE
OH	EXIST. OVERHEAD UTILITY LINE
g	EXIST. GAS LINE
w	EXIST. WATER MAIN
h	EXIST. HYDRANT
g	EXIST. GATE VALVE IN BOX
r	EXIST. GATE VALVE IN WELL
o	EXIST. STORM SEWER
o	EXIST. CATCH BASIN OR INLET
o	END SECTION
o	EXIST. SANITARY SEWER
SIGN	SIGN
POST	POST
FENCE	FENCE
SINGLE TREE	SINGLE TREE
TREE OR BRUSH LIMIT	TREE OR BRUSH LIMIT
SECTION CORNER	SECTION CORNER
FOUND IRON PIPE	FOUND IRON PIPE
FOUND IRON ROD	FOUND IRON ROD



**LEGAL DESCRIPTION**

Tax Parcel ID: 09-12-04-301-007  
(from Absolute Title, Inc., File No.: 89479, Effective Date: September 28, 2020)

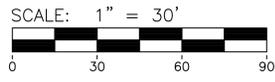
(PARCEL 1)  
Commencing at the Southwest corner of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan; thence N 87°09'00" E 1904.44 feet along the South of said Section to a point on the Westerly right-of-way line of the Ann Arbor Railroad; thence N 08°20'00" W 82.13 feet along said right-of-way line to a point on the Northerly right-of-way line of the Eisenhower Parkway; thence S 85°32'50" W 628.68 feet along said right-of-way line in the following 3 courses: N 01°53'00" W 1005.56 feet, Northerly 409.68 feet along the arc of a 1217.72 foot radius circular curve to the left, through a central angle of 19°16'34", having a chord which bears N 11°31'17" W 407.75 feet and N 21°09'34" W 43.84 feet to the Point of Beginning; thence N 21°09'34" W 232.40 feet along said right-of-way line, thence continuing along said right-of-way line Northerly 78.17 feet along the arc of a 1210.90 feet radius circular curve to the right, through a central angle of 03°41'55", having a chord which bears N 19°18'36" W 78.15 feet; thence N 87°01'00" E 239.25 feet; thence S 21°09'34" E 311.34 feet; thence S 87°01'00" W 241.90 feet to the Point of Beginning, being a part of the Southwest 1/4 of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan. Together with easement rights granted in Easement Agreement recorded in Liber 1109, Page 10, Washtenaw County Records.

Tax Parcel ID: 09-12-04-301-010  
(from Absolute Title, Inc., File No.: 89478, Effective Date: September 28, 2020)

(PARCEL 2A)  
Commencing at the Southwest corner of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan; thence North 87°09'00" East 1904.44 feet along the South line of said Section to a point on the Westerly right-of-way line of the Ann Arbor Railroad; thence North 08°20'00" West 82.13 feet along said right-of-way line to a point on the Northerly right-of-way line of the Eisenhower Parkway; thence South 85°32'50" West 628.68 feet along said right-of-way line to a point on the Easterly right-of-way line of Boardwalk Drive; thence along said right-of-way line in the following 3 courses: North 01°53'00" West 1005.56 feet, Northerly 409.68 feet along the arc of a 1217.72 foot radius circular curve to the left, through a central angle of 19°16'34", having a chord which bears North 11°31'17" West 407.75 feet, and North 21°09'34" West 43.84 feet; thence North 87°01'00" East 241.90 feet to the Point of Beginning; thence North 21°09'34" West 311.34 feet; thence North 87°01'00" East 139.97 feet to a point on the Westerly right-of-way line of the Ann Arbor Railroad; thence South 24°07'30" East 77.97 feet along said right-of-way line; thence continuing along said right-of-way line Southerly 237.33 feet along the arc of a 5679.97 foot radius circular curve to the right, through a central angle of 02°23'39", having a chord which bears South 22°55'41" East 237.31 feet; thence South 87°01'00" West 151.92 feet to the Point of Beginning, being a part of the Southwest 1/4 of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan. Together with easement rights granted in Easement Agreement recorded in Liber 1109, Page 10, Washtenaw County Records.

(PARCEL 2B-NOT SURVEYED)  
Also, commencing at the Southwest corner of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan; thence North 87°09'00" East 1904.44 feet along the South line of said Section to a point on the Westerly right-of-way line of the Ann Arbor Railroad; thence North 08°20'00" West 82.13 feet along said right-of-way line to a point on the Northerly right-of-way line of the Eisenhower Parkway; thence South 85°32'50" West 628.68 feet along said right-of-way line to a point on the Easterly right-of-way line of Boardwalk Drive; thence North 01°53'00" West 1005.56 feet along said right-of-way line, thence continuing along said right-of-way line Northerly 209.90 feet along the arc of a 1217.72 foot radius circular curve to the left, through a central angle of 09°52'34", having a chord which bears North 16°27'34" West 199.56 feet; thence North 21°09'34" West 43.84 feet continuing along said right-of-way line; thence North 87°01'00" East 393.82 feet to a point on the Westerly right-of-way line of the Ann Arbor Railroad; thence along said right-of-way line Southerly 249.05 feet along the arc of a 5679.97 foot radius circular curve to the right, through a central angle of 02°30'44", having a chord which bears South 20°28'29" East 249.03 feet; thence South 87°16'10" West 408.50 feet to the Point of Beginning, being a part of the Southwest 1/4 of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan.

(PARCEL 2C-NOT SURVEYED)  
Also, commencing at the Southwest corner of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan; thence North 01°53'00" West 1042.56 feet along the West line of said Section and the centerline of State Road; thence North 87°01'00" East 650 feet; thence North 01°53'00" West 469.20 feet; thence North 87°01'00" East 534.37 feet; thence South 21°09'34" East 43.84 feet along the Easterly right-of-way line of Boardwalk Drive; thence continuing along said right-of-way line 199.78 feet along the arc of a 1217.72 foot radius circular curve to the right, through a central angle of 09°24'00", having a chord which bears South 16°27'34" East 199.56 feet to the Point of Beginning; thence North 87°16'10" East 408.50 feet to a point on the Westerly right-of-way line of the Ann Arbor Railroad; thence along said right-of-way line 250.11 feet along the arc of a 5679.97 foot radius circular curve to the right, through a central angle of 02°31'23", having a chord which bears South 17°57'38" East 250.09 feet; thence South 87°01'00" West 459.75 feet to a point on the Easterly right-of-way line of Boardwalk Drive; thence North 01°53'00" West 34.23 feet along said right-of-way line; thence continuing along said right-of-way line 209.90 feet along the arc of a 1217.72 foot radius circular curve to the left, through a central angle of 09°52'34", having a chord which bears North 06°49'17" West 209.64 feet to the Point of Beginning, said parcel being a part of the Southwest 1/4 of Section 4, Town 3 South, Range 6 East, City of Ann Arbor, Washtenaw County, Michigan.



**NOTES**

- THIS SURVEY WAS PREPARED USING ABSOLUTE TITLE, INC., FILE NO.: 89479, WITH AN EFFECTIVE DATE OF SEPTEMBER 28, 2020, AND FILE NO.: 89478, WITH AN EFFECTIVE DATE OF SEPTEMBER 28, 2020.
- THE LEGAL DESCRIPTION DESCRIBES THE SAME PROPERTIES AS INSURED IN THE TITLE COMMITMENT AND ANY EXCEPTIONS HAVE BEEN NOTED HEREIN.
- BEARINGS ARE BASED ON ABSOLUTE TITLE, INC., FILE NO.: 89479, WITH AN EFFECTIVE DATE OF SEPTEMBER 28, 2020.
- SAID DESCRIBED PROPERTY IS NOT LOCATED WITHIN A 100-YEAR FLOOD PLAIN ZONE PER FLOOD INSURANCE RATE MAP NO. 261810A04E WITH AN EFFECTIVE DATE OF APRIL 3, 2012, FOR COMMUNITY NUMBER 260623, IN WASHTENAW COUNTY, STATE OF MICHIGAN, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.
- THERE IS NO OBSERVED EVIDENCE INDICATING ANY CEMETERIES ARE LOCATED ON THE PARCELS HEREIN DESCRIBED.
- THERE IS NO OBSERVED EVIDENCE OF BUILDINGS LOCATED ON THE PARCELS HEREIN DESCRIBED.
- THERE IS EVIDENCE OF CURRENT EARTH MOVING WORK. THERE IS NO EVIDENCE OF BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
- THERE IS NO EVIDENCE OF PROPOSED CHANGES TO STREET RIGHT-OF-WAY LINES ON THE PARCELS HEREIN DESCRIBED.
- THERE IS EVIDENCE OF FIELD DELINEATION OF WETLANDS, AS SHOWN ON SURVEY, PER CLIENT PROVIDED QUALIFIED SPECIALIST MAPPING.
- THERE IS EVIDENCE OF PLOTTABLE OFFSITE EASEMENTS OR SERVITUDES FOR THE PARCELS HEREIN DESCRIBED.

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

**BENCHMARKS**

**BENCHMARK #1:** TOP NUT OF FIRE HYDRANT LOCATED ON EAST SIDE OF BOARDWALK DRIVE, ±80 FEET NORTHWEST OF THE SW PROPERTY CORNER.  
ELEVATION=831.32' (NAVD88)

**BENCHMARK #2:** SET SPIKE IN WEST FACE OF UTILITY POLE LOCATED IN ALONG THE WESTERLY RAILROAD RIGHT-OF-WAY LINE, ±50 FEET FROM NELY FROM THE CURB LINE TO PARKING/DRIVEWAY ASSOCIATED WITH 2725 BOARDWALK DRIVE.  
ELEVATION=824.00' (NAVD88)

**MIDWESTERN CONSULTING**  
385 Plaza Drive Ann Arbor, Michigan 48108  
(734) 995-0200 • www.midwesternconsulting.com  
Land Development • Land Survey • Institutional • Municipal  
Wireless Communications • Transportation • Landfill Services

**CLIENT**  
ANN ARBOR PUBLIC SCHOOLS  
2555 SOUTH STATE STREET  
ANN ARBOR, MI 48104  
EMILE LAUZZANA  
734-994-8118

**AAPS - BOARDWALK DR - PRESCHOOL**  
ALTA/NSPS SURVEY FOR PARCELS OF LAND  
LOCATED IN THE SW 1/4 OF SECTION 4, T3S, R6E,  
CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN

**1**

DATE: 07/15/2021  
SHEET 1 OF 2  
REV. DATE  
CADD:  
ENG:  
PM:  
M.V.  
TECH. SHT:  
FILED:

**JOB No. 20308**

By: Mark Vander Veen, P.S. No. 4001056788  
Date:

MIDWESTERN CONSULTING, LLC

APPROVED  
WRP031196 v1.0  
Approved  
Issued On: 10/19/2021  
Expires On: 10/19/2021

**TREE INVENTORY**

TAG#	DBH	COMMON NAME	GENUS/SPECIES	STEMS	SCORE	LM	INV
224	5"	Black Cherry	Prunus serotina	twin			
225	10"	White Mulberry	Morus alba				X
226	16"	White Mulberry	Morus alba				X
227	12"	Honey Locust	Gleditsia triacanthos				
228	22"	American Elm	Ulmus americana			X	
229	29"	Cottonwood	Populus deltoides			X	
230	10"	Wild Plum	Prunus americana				
231	7"	Wild Plum	Prunus americana	twin			
232	6"	Wild Plum	Prunus americana	twin			
233	9"	Wild Plum	Prunus americana				
234	11"	Common Apple	Malus pumila				
235	7"	Wild Plum	Prunus americana				
236	5"	Wild Plum	Prunus americana	twin			
237	12"	Siberian Elm	Ulmus pumila				X
238	7"	Wild Plum	Prunus americana				
239	7"	Wild Plum	Prunus americana				
240	8"	Wild Plum	Prunus americana				
241	7"	Wild Plum	Prunus americana				
242	6"	Wild Plum	Prunus americana				
243	14"	American Elm	Ulmus americana				
244	7"	American Elm	Ulmus americana				
245	13"	White Mulberry	Morus alba	twin			X
246	8"	Black Walnut	Juglans nigra				
247	14"	Siberian Elm	Ulmus pumila	twin			X
248	7"	Box Elder	Acer negundo				
249	8"	Wild Plum	Prunus americana				
250	6"	Wild Plum	Prunus americana				
251	8"	Box Elder	Acer negundo				
252	12"	Black Willow	Salix nigra				
253	22"	Cottonwood	Populus deltoides				
254	15"	Cottonwood	Populus deltoides				
255	13"	American Elm	Ulmus americana				
256	6"	Wild Plum	Prunus americana				
257	9"	Siberian Elm	Ulmus pumila				X
258	8"	Black Walnut	Juglans nigra				
259	9"	Black Walnut	Juglans nigra				
260	6"	Black Walnut	Juglans nigra				
261	7"	Siberian Elm	Ulmus pumila				X
262	8"	Siberian Elm	Ulmus pumila				X
263	8"	Siberian Elm	Ulmus pumila				X
264	9"	Box Elder	Acer negundo				
265	11"	Black Cherry	Prunus serotina				
266	7"	Box Elder	Acer negundo				
267	11"	Black Walnut	Juglans nigra				
268	7"	Box Elder	Acer negundo				
269	6"	Box Elder	Acer negundo				
270	6"	Box Elder	Acer negundo	twin			
271	7"	Box Elder	Acer negundo				
272	16"	Box Elder	Acer negundo				
273	6"	Black Walnut	Juglans nigra				
274	7"	Black Walnut	Juglans nigra				
275	6"	Black Walnut	Juglans nigra				
276	6"	Common Apple	Malus pumila				
277	7"	White Oak	Quercus alba				
278	9"	Box Elder	Acer negundo				
279	6"	Black Walnut	Juglans nigra				
280	6"	Box Elder	Acer negundo				
281	18"	Cottonwood	Populus deltoides				
282	10"	Cottonwood	Populus deltoides				
283	14"	Cottonwood	Populus deltoides				
284	6"	Cottonwood	Populus deltoides				
285	12"	Cottonwood	Populus deltoides				
286	17"	Cottonwood	Populus deltoides				
287	20"	Cottonwood	Populus deltoides				
288	18"	Cottonwood	Populus deltoides				
289	13"	Cottonwood	Populus deltoides				
290	11"	Cottonwood	Populus deltoides				
291	13"	Cottonwood	Populus deltoides				
292	19"	Cottonwood	Populus deltoides				
293	13"	Cottonwood	Populus deltoides				
294	10"	Cottonwood	Populus deltoides				
295	13"	Cottonwood	Populus deltoides				
296	17"	Cottonwood	Populus deltoides				
297	15"	Cottonwood	Populus deltoides				
298	9"	Cottonwood	Populus deltoides				
299	14"	Cottonwood	Populus deltoides				
300	7"	Cottonwood	Populus deltoides				
301	17"	American Elm	Ulmus americana				
302	6"	Wild Plum	Prunus americana				
303	6"	Wild Plum	Prunus americana	twin			
304	8"	Wild Plum	Prunus americana				
305	10"	American Elm	Ulmus americana				
306	7"	Wild Plum	Prunus americana	triple			
307	7"	Wild Plum	Prunus americana	twin			
308	6"	Box Elder	Acer negundo				
309	6"	Box Elder	Acer negundo				
310	7"	Wild Plum	Prunus americana				
311	6"	Wild Plum	Prunus americana				
312	6"	Wild Plum	Prunus americana				
313	6"	Wild Plum	Prunus americana				
314	6"	Wild Plum	Prunus americana				
315	6"	Wild Plum	Prunus americana				
316	10"	Wild Plum	Prunus americana				
317	11"	Box Elder	Acer negundo	twin			
318	6"	Wild Plum	Prunus americana	twin			
319	7"	Wild Plum	Prunus americana	triple			
320	12"	Cottonwood	Populus deltoides				

321	14"	Cottonwood	Populus deltoides				
322	12"	Cottonwood	Populus deltoides				
323	9"	American Elm	Ulmus americana				
324	7"	American Elm	Ulmus americana				
325	6"	Wild Plum	Prunus americana				
326	17"	Black Willow	Salix nigra	twin			
327	6"	Wild Plum	Prunus americana				
328	7"	Wild Plum	Prunus americana				
329	6"	Wild Plum	Prunus americana	twin			
330	8"	Box Elder	Acer negundo				
331	9"	Box Elder	Acer negundo				
332	14"	Box Elder	Acer negundo	twin			
333	6"	Wild Plum	Prunus americana	twin			
334	8"	Wild Plum	Prunus americana				
335	7"	Wild Plum	Prunus americana				
336	6"	Wild Plum	Prunus americana				
337	7"	Wild Plum	Prunus americana				
338	9"	Box Elder	Acer negundo				
339	9"	Wild Plum	Prunus americana				
340	9"	Box Elder	Acer negundo				
341	7"	Box Elder	Acer negundo				
342	7"	Box Elder	Acer negundo				
343	6"	Wild Plum	Prunus americana				
344	6"	Box Elder	Acer negundo				
345	5"	Wild Plum	Prunus americana	twin			
346	7"	Wild Plum	Prunus americana				
347	7"	Wild Plum	Prunus americana				
348	7"	Wild Plum	Prunus americana				
349	7"	Wild Plum	Prunus americana				
350	6"	Wild Plum	Prunus americana	twin			
351	7"	Wild Plum	Prunus americana				
352	7"	Wild Plum	Prunus americana				
353	12"	American Elm	Ulmus americana				
354	11"	Box Elder	Acer negundo				
355	9"	Box Elder	Acer negundo				
356	15"	Cottonwood	Populus deltoides				
357	14"	Cottonwood	Populus deltoides				
358	13"	Cottonwood	Populus deltoides				
359	6"	Wild Plum	Prunus americana				
360	6"	Wild Plum	Prunus americana	twin			
361	8"	Box Elder	Acer negundo	triple			
362	11"	Box Elder	Acer negundo				
363	8"	Box Elder	Acer negundo				
364	8"	Wild Plum	Prunus americana				
365	6"	Wild Plum	Prunus americana				
366	8"	Box Elder	Acer negundo				
367	6"	Wild Plum	Prunus americana				
368	6"	Wild Plum	Prunus americana				
369	29"	Silver Maple	Acer saccharinum			X	
370	6"	Wild Plum	Prunus americana				
371	11"	Box Elder	Acer negundo				
372	10"	Box Elder	Acer negundo				
373	7"	Wild Plum	Prunus americana				
374	6"	Wild Plum	Prunus americana				
375	13"	Silver Maple	Acer saccharinum	triple		X	

**EXCEPTIONS**

- EXCEPTIONS (Tax Parcel ID: 09-12-04-301-007)  
(from Absolute Title, Inc., File No.: 89479, Effective Date: September 28, 2020)
- Terms and conditions of Easement Agreement, as recorded in Liber 1109, Page 10, Washtenaw County Records. (PLOTTED)
  - Right of way for roads and utilities, as recorded in Liber 1118, Page 120, Washtenaw County Records. (PLOTTED)
  - Building and use restrictions contained in instrument recorded in Liber 2348, Page 150, Washtenaw County Records, but omitting any such covenant or restriction based on race, color, religion, sex, handicap, familial status, or national origin. (NOT PLOTTABLE)

- EXCEPTIONS Tax Parcel ID: 09-12-04-301-010  
(from Absolute Title, Inc., File No.: 89478, Effective Date: September 28, 2020)
- Terms and conditions of Easement Agreement, as recorded in Liber 1109, Page 10, Washtenaw County Records. (PLOTTED)
  - Right of way for roads and utilities, as recorded in Liber 1118, Page 120, Washtenaw County Records. (PLOTTED)
  - Right of Way in favor of The Detroit Edison Company, as recorded in Liber 1578, Page 818, and Liber 1689, Page 931, Washtenaw County Records. (NOT PLOTTED, DOES NOT AFFECT PARCEL 2B)
  - Easement Agreement in favor of the City of Ann Arbor, as recorded in Liber 1600, Pages 876 and 878, Washtenaw County Records. (PLOTTED, DOES NOT AFFECT PARCEL 2B)
  - Reciprocal Easement Agreement as recorded in Liber 2348, Page 156, amended in Liber 2393, Page 187, and further disclosed by instruments recorded in Liber 2556, Page 523, and Liber 3131, Page 789, Washtenaw County Records. (PLOTTED, DOES NOT EFFECT PARCEL 2B)
  - Building and use restrictions contained in instrument recorded in Liber 2348, Page 150, Washtenaw County Records, but omitting any such covenant or restriction based on race, color, religion, sex, handicap, familial status or national origin. (NOT PLOTTABLE)
  - Permanent Electric Transmission Line Easement Agreement, as recorded in Liber 5255, Page 638, Washtenaw County Records. (PLOTTED)
  - Declaration of Taking as recorded in Liber 5284, Page 74, Washtenaw County Records, and Stipulated Order recorded in Liber 5295, Page 954, Washtenaw County Records. (NOT PLOTTED, DOES NOT EFFECT PARCEL 2B)

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.

M:\Civ\134\_Pro\1\20308\Survey\20308\_s.v1.dwg, 1/19/2021 5:23 PM, Merik Vender Veen, PAGE 2, MLLC PDF.pd3 Copyright © 2021 Midwestern Consulting L.L.C. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting L.L.C.

**M I D W E S T E R N**  
**C O N S U L T I N G**  
385 Plaza Drive Ann Arbor, Michigan 48108  
(734) 995-0200 • www.midwesternconsulting.com  
Land Development • Land Survey • Institutional • Municipal  
Wireless Communications • Transportation • Landfill Services



CLIENT  
ANN ARBOR PUBLIC SCHOOLS  
2555 SOUTH STATE STREET  
ANN ARBOR, MI 48104  
EMILE LAUZZANA  
734-994-8118

**AAPS - BOARDWALK DR - PRESCHOOL**  
ALTA/NSPS SURVEY FOR PARCELS OF LAND  
LOCATED IN THE SW 1/4 OF SECTION 4, T3S, R6E,  
CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN

**2**

JOB No.	20308
REVISIONS:	
DATE:	01/15/2021
SHEET:	2 OF 2
REV. DATE:	
CADD:	
ENG:	
PM:	MV
TECH:	SSH
DATE:	01/15/2021

## PRESCHOOL PLAYGROUND IMPROVEMENTS

CITY OF ANN ARBOR, MICHIGAN

100% CDS/SUBMITTAL - AADD	10-11-21
95% CDS/IBID SET	04-29-21
50% CONSTRUCTION DOCS.	04-09-21

200790 ECT PROJECT NUMBER	
DESIGNED BY	CHECKED BY
DRAWN BY	APPROVED BY

### SITE PREPARATION & SESC

SCALE: 1" = 20' @ 24" x 36"

NORTH  
SHEET NUMBER  
**4**

Approved  
EGLE-WH  
Expires On: 10/19/2021

#### GENERAL NOTES:

- UNDERGROUND UTILITIES: FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, 1974, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.
- SURVEY DATA PRESENTED IN THESE DRAWINGS WAS PROVIDED BY MIDWESTERN CONSULTING.
- STORAGE OF EQUIPMENT AND CONSTRUCTION MATERIALS SHALL BE RESTRICTED TO DESIGNATED STAGING AREAS AS INDICATED ON THE PLANS, UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.
- ALL UTILITIES, CULVERTS AND BENCHMARKS SHALL BE PRESERVED DURING CONSTRUCTION ACTIVITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS. CONTRACTOR TO REPLACE DAMAGED UTILITIES, CULVERTS OR BENCHMARKS AT OWN EXPENSE.
- ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED AS INDICATED ON THE PLANS OR AS INDICATED BY LANDSCAPE ARCHITECT. WORK BEYOND THESE LIMITS SHALL BE AS DIRECTED BY LANDSCAPE ARCHITECT.
- TRANSPORTATION OF EQUIPMENT AND MATERIALS TO/FROM THE SITE ON STATE HIGHWAYS AND TRUNK LINES SHALL CONFORM TO ALL LOCAL AND STATE TRAFFIC LAWS. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PERTAINING TO DELIVERY OF EQUIPMENT AND MATERIALS TO/FROM THE SITE. COSTS OF OBTAINING NECESSARY PERMITS IS INCIDENTAL TO THE WORK.
- ALL WORK SHALL BE COMPLETED BETWEEN THE HOURS OF 7:00AM AND 7:00PM. ALL WORK SHALL BE COMPLETED MONDAY THROUGH SATURDAY.
- CONSTRUCTION ACCESS TO THE SITES FOR ALL ACTIVITIES WILL BE AS DIRECTED BY OWNER. NO OTHER ACCESS IS ALLOWED WITHOUT WRITTEN PERMISSION FROM THE OWNER.
- ALL MATERIALS REMOVED, EXCEPT WHERE OTHERWISE INDICATED ON THE PLANS, SHALL BE LEGALLY DISPOSED OF OFF SITE.
- ALL EXCESS SOIL AND FILL GENERATED DURING REQUIRED EXCAVATION AS SHOWN ON DRAWINGS SHALL BE LEGALLY DISPOSED OF OFF-SITE.

#### SOIL EROSION AND SEDIMENT CONTROL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A SOIL EROSION AND SEDIMENT CONTROL PERMIT FROM THE GOVERNING ENTITY.
- ALL ASPECTS OF THE SOIL EROSION AND SEDIMENT CONTROL PERMIT SHALL BE ADHERED TO THROUGHOUT THE DURATION OF THE PROJECT. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE ENGINEER PRIOR TO THE BEGINNING OF EARTHWORK.
- DESIGN, CONSTRUCT, AND COMPLETE THE EARTH CHANGE IN A MANNER THAT LIMITS THE EXPOSED AREA OF DISTURBED LAND FOR THE SHORTEST PERIOD OF TIME.
- TEMPORARY OR PERMANENT CONTROL MEASURES SHALL BE DESIGNED AND INSTALLED TO CONVEY WATER AROUND, THROUGH OR FROM THE EARTH CHANGE AT A NON-EROSIVE VELOCITY.
- REMOVE SEDIMENT CAUSED BY ACCELERATED SOIL EROSION FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH CHANGE.
- INSTALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES BEFORE OR UPON COMMENCEMENT OF THE EARTH CHANGE ACTIVITY AND MAINTAIN THE MEASURES ON A DAILY BASIS. REMOVE TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AFTER PERMANENT SOIL EROSION MEASURES ARE IN PLACE AND THE AREA IS STABILIZED. ("STABILIZED" MEANS THE ESTABLISHMENT OF VEGETATION OR THE PROPER PLACEMENT, GRADING OR COVERING OF SOIL TO ENSURE ITS RESISTANCE TO SOIL EROSION, SLIDING, OR OTHER EARTH MOVEMENT.)
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE DRAINAGE
- CONTRACTOR IS RESPONSIBLE TO PROTECT ADJACENT WATER COURSES FROM THE DISCHARGE OF SEDIMENT DURING CONSTRUCTION.
- INSTALL PERMANENT EROSION CONTROL MEASURES WITHIN 5 DAYS OF COMPLETING FINAL GRADING OR MAINTAIN TEMPORARY MEASURES UNTIL PERMANENT MEASURES ARE INSTALLED.
- INSTALL TEMPORARY INLET FILTERS AT ALL ADJACENT AND DOWN-GRADIENT STORM WATER INLETS. CATCH BASINS AND MANHOLES AS NEEDED BASED ON SITE CONDITIONS. CATCH BASIN INLET FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT.
- THE USE OF HEAVY EQUIPMENT WILL BE MINIMAL TO CONTROL SEDIMENT TRACKOUT. ANY MUD/SILT TRACKED SHALL BE IMMEDIATELY REMOVED
- TEMPORARY SESC MEASURES SUCH AS STRAW WATTLES, COIR LOGS, STRAW BALES OR SILT FENCE SHALL BE INSTALLED ALONG SENSITIVE AREAS AS NECESSARY. MEASURES WILL BE MAINTAINED AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. IF REPAIR OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT ACCUMULATES TO 1/2 THE HEIGHT OF WATTLES OR SILT FENCE. CONTRACTOR SHALL REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL WATTLES OR FENCE IF IT FAILS. ADDITIONALLY, THE CONTRACTOR SHALL REINSTALL ANY PORTION OF THE WATTLES OR FENCING DAMAGED BY CONSTRUCTION MACHINERY.
- PLACE STOCKPILES AND OTHER SPOIL PILES AWAY FROM THE DRAINAGE SYSTEM TO MINIMIZE SEDIMENT TRANSPORT. IF THE STOCKPILE AND/OR SPOIL PILE MUST REMAIN ON-SITE OVERNIGHT, OR IF THE WEATHER CONDITIONS INDICATE THE CHANCE FOR PRECIPITATION, A) COVER THE PILE WITH WATER REPELLENT MATERIAL TO PREVENT EROSION AND/OR B) INSTALL SILT FENCING AROUND THE BASE OF THE PILE TO PREVENT TRANSPORT OF SEDIMENT TO THE STORM WATER SYSTEM, OR APPLY OTHER CONTROL METHODS APPROPRIATE TO THE SIDE. CONTROL MEASURES TO GUARD AGAINST WIND EROSION MUST ALSO BE EMPLOYED, SUCH AS WETTING OR COVERING THE STOCKPILES. KEEP AS FEW STOCKPILES AS POSSIBLE DURING THE COURSE OF THE PROJECT.
- SEEDING OR OTHER STABILIZATION SHALL BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
- CONTRACTOR SHALL MAINTAIN DUST CONTROL ON THE SITE THROUGHOUT THE DURATION OF THE CONSTRUCTION PROCESS.
- DISTURBED AREAS WILL BE MINIMIZED THROUGH SEQUENCING OF PROJECTS, AS DESCRIBED IN THE DOCUMENT CONSTRUCTION SEQUENCE.
- WEEKLY INSPECTIONS BY A SESC TRAINED CERTIFIED STORM WATER MANAGEMENT OPERATOR AS WELL AS PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL WILL BE REQUIRED. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS ADDITIONAL CONTROLS.
- SILT FENCE SHALL BE 3' HIGH PRE-ASSEMBLED FILTER FENCE. FABRIC SHALL ALLOW WATER TO PASS THROUGH WHILE RETAINING SEDIMENT AND DEBRIS. STAKES SHALL BE HARDWOOD AND SHALL BE ON 8' CENTERS. FABRIC SHALL BE DOUBLE STAPLED TO TOP OF STAKE TO ENSURE DURABILITY.

#### CLEARING AND GRUBBING NOTES

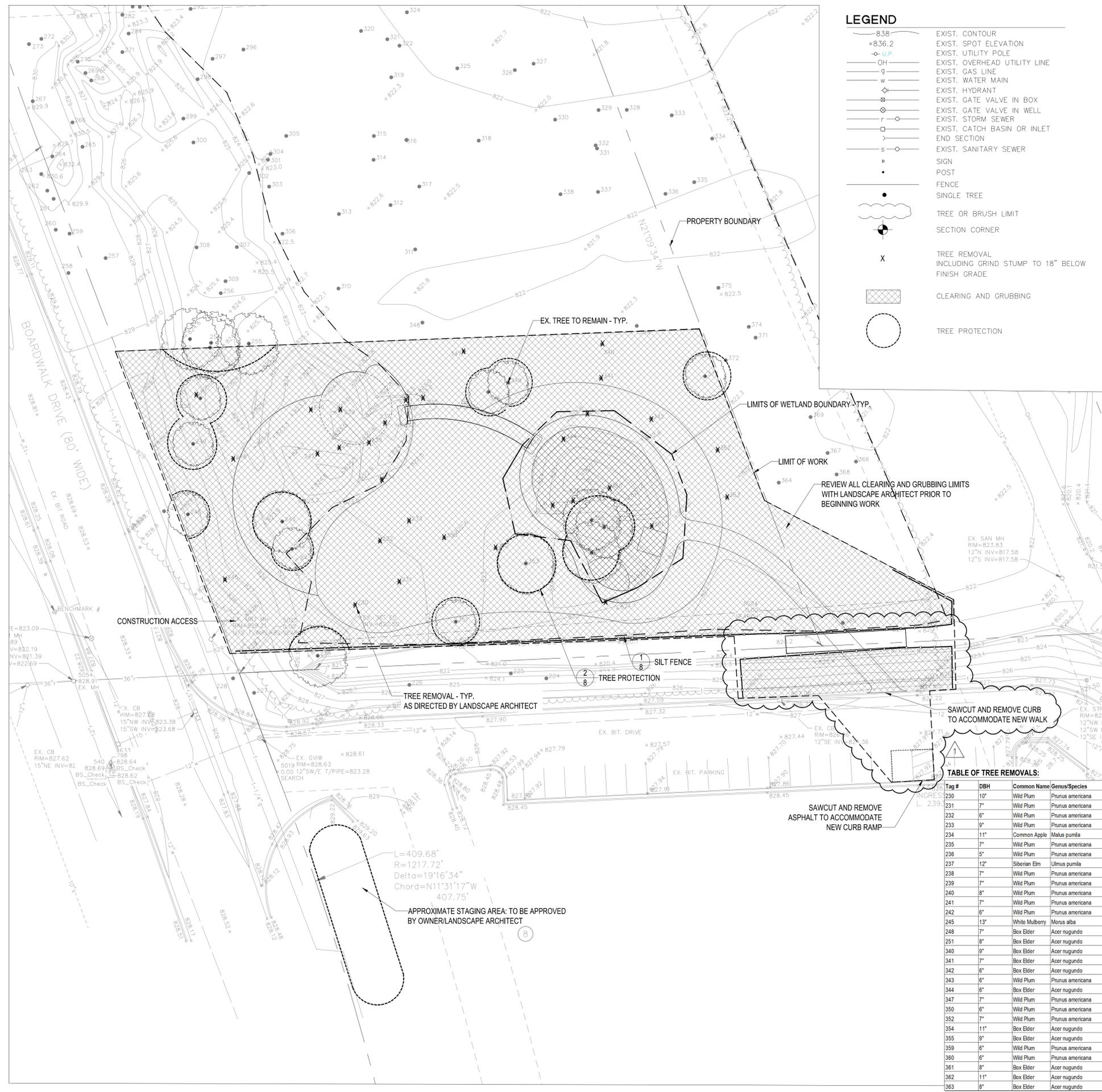
- REVIEW CLEARING LIMITS AND TREE REMOVALS WITH PROJECT LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
- REFER TO GRADING PLAN AND SITE PLAN TO DETERMINE THE DEPTH OF EXCAVATION TO SUBGRADE.
- ALL SILT FENCE AND PROTECTIVE FENCE SHALL BE INSTALLED PRIOR TO CLEARING OPERATIONS. ALL FENCING SHALL BE MAINTAINED THROUGHOUT DURATION OF PROJECT. FENCING SHALL BE REMOVED ONLY UPON APPROVAL BY LANDSCAPE ARCHITECT.
- ALL PLANT MATERIAL NOT MARKED FOR REMOVAL SHALL BE DISTURBED AS LITTLE AS POSSIBLE DURING THE CLEARING AND CONSTRUCTION OPERATIONS. NO EXCAVATION SHALL BE DONE WITHIN THE DRIP LINE (LIMIT OF OVERHANGING BRANCHES) OF TREES TO BE SAVED, UNLESS SPECIFICALLY APPROVED BY THE LANDSCAPE ARCHITECT. THE LOWER BRANCHES OF ALL TREES TO REMAIN SHALL NOT BE REMOVED, OR DAMAGED BY CONSTRUCTION EQUIPMENT. AVOID COMPACTION OF ROOTS.

#### STAGING/ ACCESS NOTES:

- EQUIPMENT ACCESS AND STAGING AND MATERIALS STORAGE CAN OCCUR WITHIN THE DESIGNATED STAGING AREAS OR IN AREAS APPROVED BY THE LANDSCAPE ARCHITECT. EXACT LOCATION OF STAGING AREAS TO BE DETERMINED BY NEGOTIATION BETWEEN CONTRACTOR AND OWNER. NO ADDITIONAL VEGETATION CLEARING FOR ACCESS OR STAGING IS PERMITTED WITHOUT APPROVAL OF THE ENGINEER AND OWNER.
- CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OVER EXISTING DRIVE TO PREVENT PHYSICAL DAMAGE OR CHEMICAL DAMAGE FROM LEAKING PETROLEUM PRODUCTS. REPAIR OF DAMAGED DRIVE SHALL BE AT CONTRACTOR'S EXPENSE UNLESS SPECIFICALLY ACCOUNTED FOR UNDER CONTRACTOR'S SITE RESTORATION LINE ITEM.
- EXCAVATED MATERIAL THAT WILL BE LEFT ONSITE TO BE STAGED IN STAGING AREAS DURING CONTRACTOR USE OF STAGING AREAS.

#### LEGEND

- 838 EXIST. CONTOUR
- x836.2 EXIST. SPOT ELEVATION
- U.P. EXIST. UTILITY POLE
- OH EXIST. OVERHEAD UTILITY LINE
- g EXIST. GAS LINE
- w EXIST. WATER MAIN
- h EXIST. HYDRANT
- EX EXIST. GATE VALVE IN BOX
- EW EXIST. GATE VALVE IN WELL
- r EXIST. STORM SEWER
- CB EXIST. CATCH BASIN OR INLET
- END SECTION
- S-O EXIST. SANITARY SEWER
- POST SIGN
- FENCE
- SINGLE TREE
- TREE OR BRUSH LIMIT
- SECTION CORNER
- X TREE REMOVAL INCLUDING GRIND STUMP TO 18" BELOW FINISH GRADE
- CLEARING AND GRUBBING
- TREE PROTECTION



#### TABLE OF TREE REMOVALS:

Tag #	DBH	Common Name	Genus/Species
230	10"	Wild Plum	Prunus americana
231	7"	Wild Plum	Prunus americana
232	6"	Wild Plum	Prunus americana
233	9"	Wild Plum	Prunus americana
234	11"	Common Apple	Malus pumila
235	7"	Wild Plum	Prunus americana
236	5"	Wild Plum	Prunus americana
237	12"	Siberian Elm	Ulmus pumila
238	7"	Wild Plum	Prunus americana
239	7"	Wild Plum	Prunus americana
240	8"	Wild Plum	Prunus americana
241	7"	Wild Plum	Prunus americana
242	6"	Wild Plum	Prunus americana
245	13"	White Mulberry	Morus alba
248	7"	Box Elder	Acer nigrum
251	8"	Box Elder	Acer nigrum
340	9"	Box Elder	Acer nigrum
341	7"	Box Elder	Acer nigrum
342	6"	Box Elder	Acer nigrum
343	6"	Wild Plum	Prunus americana
344	6"	Box Elder	Acer nigrum
347	7"	Wild Plum	Prunus americana
350	6"	Wild Plum	Prunus americana
352	7"	Wild Plum	Prunus americana
354	11"	Box Elder	Acer nigrum
355	9"	Box Elder	Acer nigrum
359	6"	Wild Plum	Prunus americana
360	6"	Wild Plum	Prunus americana
361	8"	Box Elder	Acer nigrum
362	11"	Box Elder	Acer nigrum
363	8"	Box Elder	Acer nigrum

3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171



## PRESCHOOL PLAYGROUND IMPROVEMENTS

CITY OF ANN ARBOR, MICHIGAN

### SITE PLAN AND OVERALL IMPACTS

SCALE: 1" = 20' @ 24" x 36"

NORTH  
SHEET NUMBER  
**6**

Expires On: 10/19/2021

#### LEGEND

8.38	EXIST. CONTOUR
x836.2	EXIST. SPOT ELEVATION
U.P.	EXIST. UTILITY POLE
OH	EXIST. OVERHEAD UTILITY LINE
g	EXIST. GAS LINE
w	EXIST. WATER MAIN
⊕	EXIST. HYDRANT
⊕	EXIST. GATE VALVE IN BOX
⊕	EXIST. GATE VALVE IN WELL
r	EXIST. STORM SEWER
□	EXIST. CATCH BASIN OR INLET
—	END SECTION
s	EXIST. SANITARY SEWER
p	SIGN
•	POST
x-x	FENCE
•	SINGLE TREE
☁	TREE OR BRUSH LIMIT
+	SECTION CORNER
▨	APPROXIMATE WETLAND IMPACT AREAS
○	FENCE POST FOOTING WETLAND IMPACTS
---	EXISTING WETLAND BOUNDARY

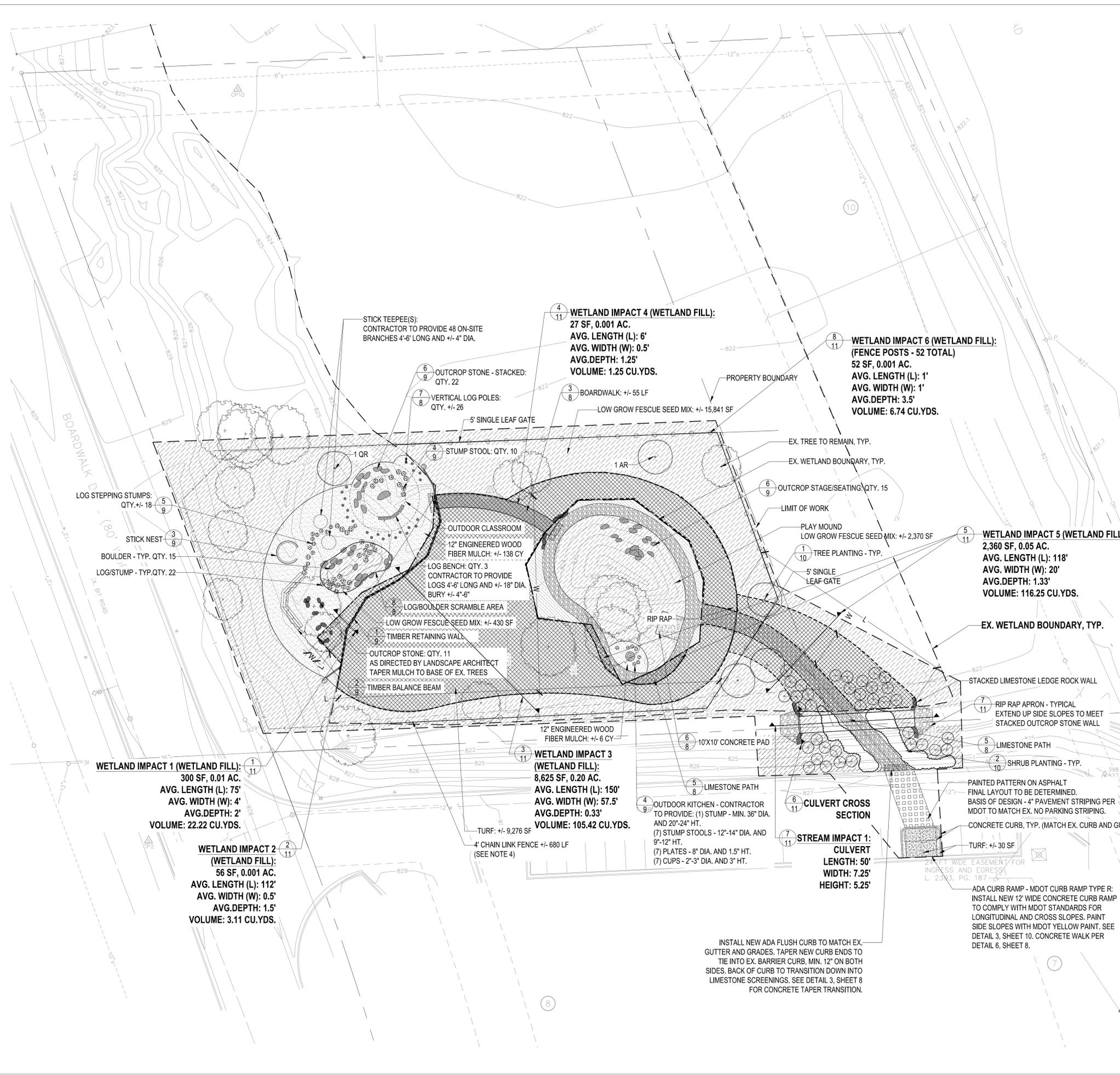
ELEC. EASEM. L: 52'

- #### SEEDING:
- SEED AREAS SHALL BE SEEDDED AFTER APRIL 15, (WHEN SOIL IS FREE OF FROST AND IN WORKABLE CONDITION), BUT BEFORE JUNE 1 OR AFTER AUGUST 15, BUT BEFORE OCTOBER 1, OR AS APPROVED BY THE ENGINEER.
  - LIGHTLY SCARIFY SO THAT THE BED IS SMOOTH AND FREE OF LARGE CLUMPS. SEED BED SHALL BE FIRM, BUT NOT COMPACT. SEED IMMEDIATELY AFTER SCARIFYING. DO NOT FERTILIZE.
  - ALL SEEDED AREAS SHALL BE HYDROSEEDDED. A HYDROMULCH CONSISTING OF CELLULOSE OR SIMILAR MULCH WITH TACKIFIER SUITABLE FOR HYDROSEEDING SHALL BE USED AS A SEEING METHOD. NO STRAW MULCH SHALL BE USED.
  - ALL WATER USED IN HYDROMULCH SHALL BE FREE OF SUBSTANCES DETRIMENTAL TO PLANT GROWTH AND SHALL BE SUITABLE FOR DISCHARGE INTO SURFACE WATERS BASED ON LOCAL, STATE, AND FEDERAL REGULATORY REQUIREMENTS. SEEDING METHOD SHALL ENSURE COMPLETE COVERAGE OF DESIGNATED AREA. RE-SEED AREAS WITH GAPS IN SEEDING AT NO ADDITIONAL COST TO OWNER.
  - DO NOT SOW SEED WHERE STANDING WATER IS PRESENT.
  - SOW SEED AT A SPECIES RATE PER MANUFACTURERS HIGH END SEEDING RATE. LIGHTLY RAKE TO INCORPORATE SEED INTO SOIL. DO NOT COVER SEED MORE THAN 1/4 INCH WITH SOIL. SEED DRILLING IS ALSO ACCEPTABLE.
  - CONTRACTOR SHALL REPAIR DAMAGED VEGETATION AND AERATE SOIL OVER ROOT ZONE OF NEGATIVELY IMPACTED VEGETATION. RE-SEED ALL DISTURBED AREAS TO PRE-EXISTING CONDITIONS.
  - EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
  - PROTECTION FROM TRAFFIC AND EROSION IN NEWLY SEEDED AREAS IS THE RESPONSIBILITY OF THE CONTRACTOR. SAFETY FENCES AND/OR OTHER BARRIER METHODS WITH APPROPRIATE SIGNAGE MAY BE USED FOR ONE YEAR FROM COMPLETION OF CONSTRUCTION ACTIVITIES. ALL COSTS ASSOCIATED WITH THIS IS INCLUSIVE OF CONTRACTOR'S PRICING.
  - NOTIFY THE OWNER PRIOR TO AND FOLLOWING ANY MAINTENANCE ACTIVITY.
  - FINAL ACCEPTANCE OF WORK WILL BE SUBJECT TO ACCEPTANCE BY PROJECT MANAGER AND OWNER AT THE END OF WARRANTY PERIOD.

- #### GENERAL NOTES:
- CONTRACTOR TO ENSURE MIN. OF 12" ENGINEERED WOOD FIBER MULCH IS INSTALLED IN AREAS NOTED ON DRAWING.
  - CONTRACTOR SHALL VERIFY LOCATIONS OF ALL PLAY ELEMENTS WITH OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
  - ALL SPIKES/FASTENERS USED TO TIE THE NATURAL PIECES TOGETHER AND/OR USED TO TIE DOWN PERMANENT LANDSCAPING MATERIALS INCLUDING BUT NOT LIMITED TO STONE BASE CONTAINMENT EDGING, ENGINEERED WOOD FIBER EDGING, ETC. ARE FULLY EMBEDDED/NOT EXPOSED IN FINAL INSTALLATION. FASTENERS THAT ARE EXPOSED SHOULD MEET THE REQUIREMENTS OUTLINED IN CPSC PLAYGROUND REQUIREMENTS.
  - CHAIN-LINK FENCE:
    - SEE SPECIFICATION 323113.
    - FENCE TO HAVE TOP & BOTTOM RAILS W/ KNUCKLED SELVAGES.
    - POST SPACING MAX. 8' - 0" ON CENTER.
    - ALL FENCING AND HARDWARE SHALL HAVE A THERMALLY FUSED BLACK POLYMER COATING, 10 MIL MIN. THICKNESS.
    - PROVIDE SHOP DRAWINGS BY A LICENSED MICHIGAN PROFESSIONAL ILLUSTRATING A COMPLETE CHAINLINK FENCE SYSTEM FROM FOOTINGS TO TOP OF FENCE INCLUDING POSTS AND ALL CONNECTIONS.
    - SET BOTTOM FENCE RAIL MAX. 3" ABOVE GRADE, TYP.
    - ALL GATES TO HAVE CHILD PROOF LOCKING MECHANISM. SUBMIT PRODUCT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

#### PLANT LIST:

Symbol	Quantity	Scientific Name	Common Name	Size	Cont.	Spacing
<b>SHRUBS</b>						
Ce	52	<i>Ceanothus americanus</i>	New Jersey Tea	Min. 24" ht.	5 Gallon	3' o.c.
Cs	14	<i>Cornus sericea</i>	Red-osier Dogwood	Min. 36" ht.	5 gallon	5' o.c.
Po	6	<i>Physocarpus opulifolius</i>	Common Ninebark	Min. 30" ht.	5 gallon	5' o.c.
Va	8	<i>Viburnum acerfolium</i>	Maple-leaved Viburnum	Min. 36" ht.	5 gallon	5' o.c.
<b>TREES</b>						
AR	3	<i>Acer rubrum</i>	Red Maple	2.5' Cal.	B&B	As Shown
CO	1	<i>Celtis occidentalis</i>	Hackberry	2.5' Cal.	B&B	As Shown
QR	3	<i>Quercus rubra</i>	Red Oak	2.5' Cal.	B&B	As Shown



**WETLAND IMPACT 1 (WETLAND FILL):**  
300 SF, 0.01 AC.  
AVG. LENGTH (L): 75'  
AVG. WIDTH (W): 4'  
AVG. DEPTH: 2'  
VOLUME: 22.22 CU.YDS.

**WETLAND IMPACT 2 (WETLAND FILL):**  
56 SF, 0.001 AC.  
AVG. LENGTH (L): 112'  
AVG. WIDTH (W): 0.5'  
AVG. DEPTH: 1.5'  
VOLUME: 3.11 CU.YDS.

**WETLAND IMPACT 3 (WETLAND FILL):**  
8,625 SF, 0.20 AC.  
AVG. LENGTH (L): 150'  
AVG. WIDTH (W): 57.5'  
AVG. DEPTH: 0.33'  
VOLUME: 105.42 CU.YDS.

**WETLAND IMPACT 4 (WETLAND FILL):**  
27 SF, 0.001 AC.  
AVG. LENGTH (L): 6'  
AVG. WIDTH (W): 0.5'  
AVG. DEPTH: 1.25'  
VOLUME: 1.25 CU.YDS.

**WETLAND IMPACT 6 (WETLAND FILL):**  
(FENCE POSTS - 52 TOTAL)  
52 SF, 0.001 AC.  
AVG. LENGTH (L): 1'  
AVG. WIDTH (W): 1'  
AVG. DEPTH: 3.5'  
VOLUME: 6.74 CU.YDS.

**WETLAND IMPACT 5 (WETLAND FILL):**  
2,360 SF, 0.05 AC.  
AVG. LENGTH (L): 118'  
AVG. WIDTH (W): 20'  
AVG. DEPTH: 1.33'  
VOLUME: 116.25 CU.YDS.

**STREAM IMPACT 1: CULVERT**  
LENGTH: 50'  
WIDTH: 7.25'  
HEIGHT: 5.25'

INSTALL NEW ADA FLUSH CURB TO MATCH EX. GUTTER AND GRADES. TAPER NEW CURB ENDS TO TIE INTO EX. BARRIER CURB, MIN. 12" ON BOTH SIDES. BACK OF CURB TO TRANSITION DOWN INTO LIMESTONE SCREENINGS. SEE DETAIL 3, SHEET 8 FOR CONCRETE TAPER TRANSITION.

ADA CURB RAMP - MDOT CURB RAMP TYPE R. INSTALL NEW 12" WIDE CONCRETE CURB RAMP TO COMPLY WITH MDOT STANDARDS FOR LONGITUDINAL AND CROSS SLOPES. PAINT SIDE SLOPES WITH MDOT YELLOW PAINT. SEE DETAIL 3, SHEET 10. CONCRETE WALK PER DETAIL 6, SHEET 8.

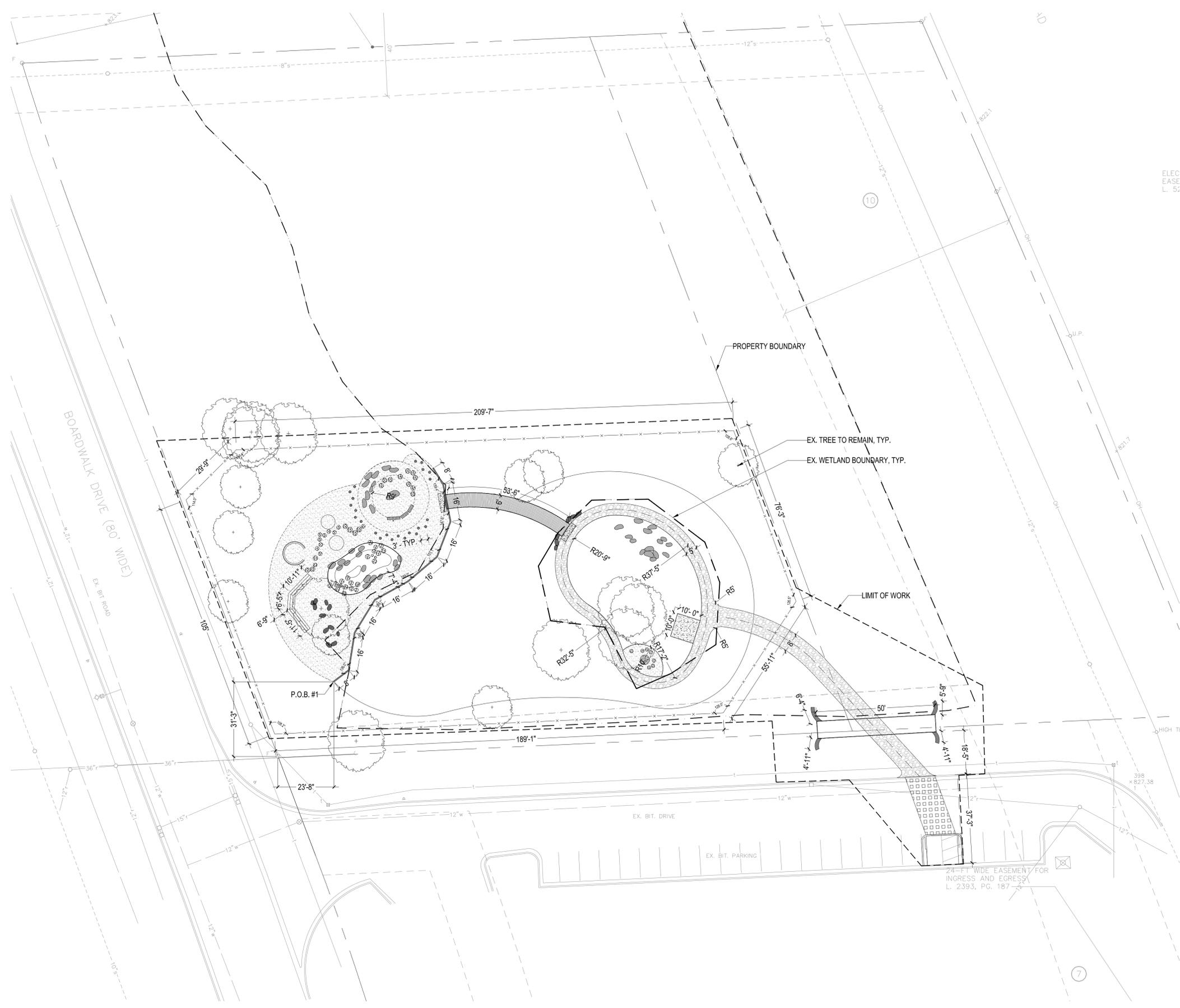
3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

## LEGEND

— 8.38	EXIST. CONTOUR
× 836.2	EXIST. SPOT ELEVATION
○ U.P.	EXIST. UTILITY POLE
— OH	EXIST. OVERHEAD UTILITY LINE
— g	EXIST. GAS LINE
— w	EXIST. WATER MAIN
⊕	EXIST. HYDRANT
⊗	EXIST. GATE VALVE IN BOX
⊙	EXIST. GATE VALVE IN WELL
— r	EXIST. STORM SEWER
— □	EXIST. CATCH BASIN OR INLET
— >	END SECTION
— s	EXIST. SANITARY SEWER
•	SIGN
•	POST
—	FENCE
•	SINGLE TREE
⊕	TREE OR BRUSH LIMIT
⊙	SECTION CORNER

ELEC  
EASE  
L: 52

GENERAL NOTE:  
1. CONTRACTOR TO STAKE OUT LOCATION OF ALL PLAY ELEMENTS AND FEATURES. CONFIRM WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCING INSTALLATION.



## PRESCHOOL PLAYGROUND IMPROVEMENTS

CITY OF ANN ARBOR, MICHIGAN

EGLE PERMIT APPLICATION REV 10-11-21  
EGLE PERMIT APPLICATION REV 07-28-21  
EGLE PERMIT APPLICATION 06-16-21  
95% CDS/BID SET 04-29-21  
50% CONSTRUCTION DOCS. 04-09-21

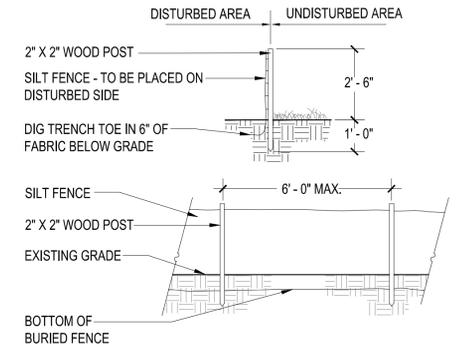
200790  
ECT PROJECT NUMBER  
DESIGNED BY: JL  
CHECKED BY: PJ  
DRAWN BY: MP  
APPROVED BY: PJ

## LAYOUT PLAN

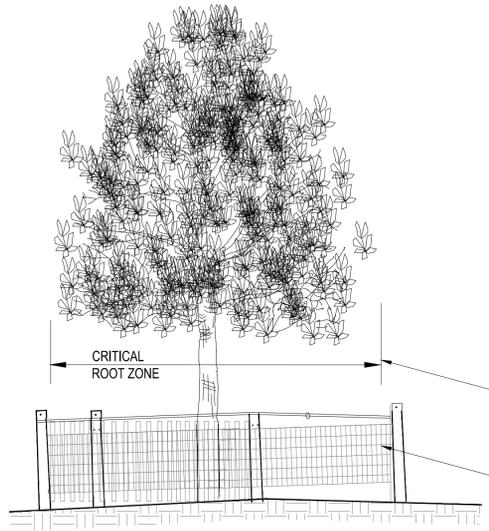
SCALE: 1" = 20' @ 24" x 36"  
0 10 20 40

NORTH  
SHEET NUMBER  
**7**

3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171



**1**  
**8** SILT FENCE  
NOT TO SCALE



**2**  
**8** TREE PROTECTION FENCE DETAIL  
NOT TO SCALE

**TREE PROTECTION NOTES:**

TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL IT IS AUTHORIZED TO BE REMOVED BY THE CITY OF ANN ARBOR OR ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY.

IF TREE PROTECTION CANNOT BE MAINTAINED FOR A REGULATED TREE THROUGHOUT THE CONSTRUCTION PERIOD, REPLACEMENT OF THAT TREE MAY BE REQUIRED PRIOR TO ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY.

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN DRIP LINES.

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES.

ALL REQUIRED SWALES NEED TO BE DIRECTED AROUND PROTECTED AREAS. IN INSTANCES WHERE SWALES ARE APPROVED THROUGH PROTECTED AREAS, THEY NEED TO BE HAND DUG. MACHINERY OF ANY KIND IS PROHIBITED.

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREES.

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.

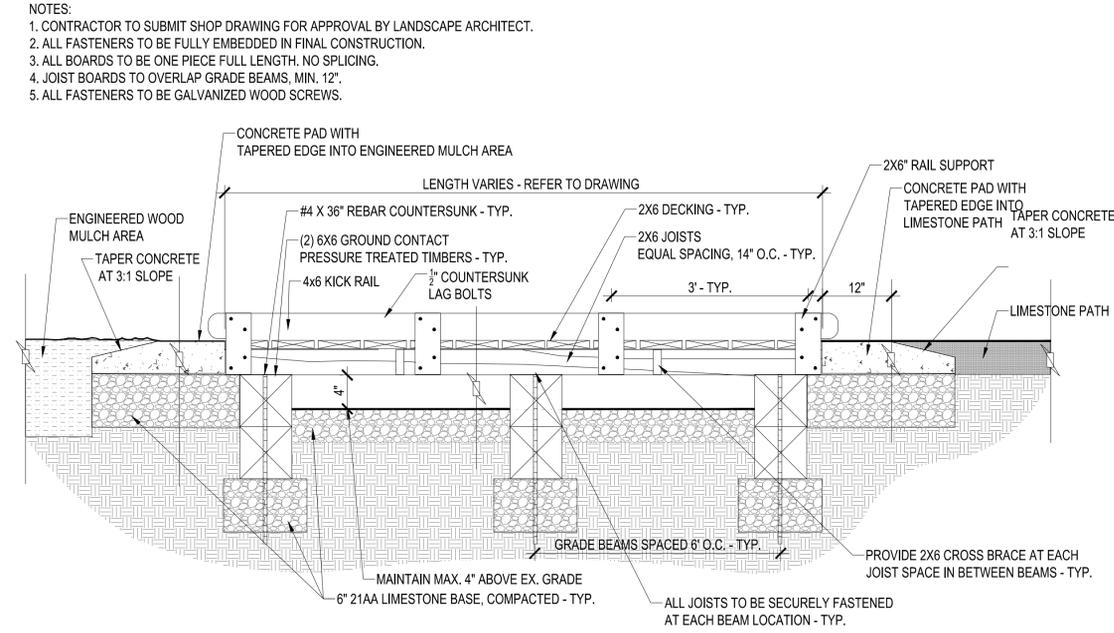
REGULATED TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.

TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH EITHER FLAGGING OR WATER BASED PAINT PRIOR TO THE TREE CLEARING OPERATIONS.

PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE.

FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND.

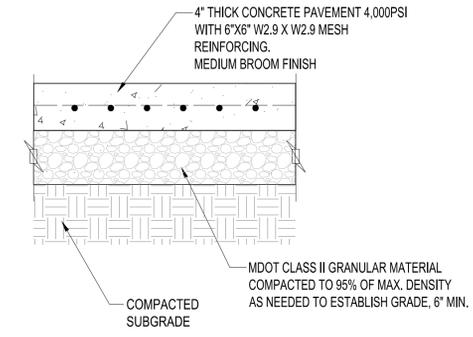
4' HT. PROTECTIVE FENCING, EITHER WOODEN SLATS OR PLASTIC ORANGE SNOW FENCING MATERIAL.



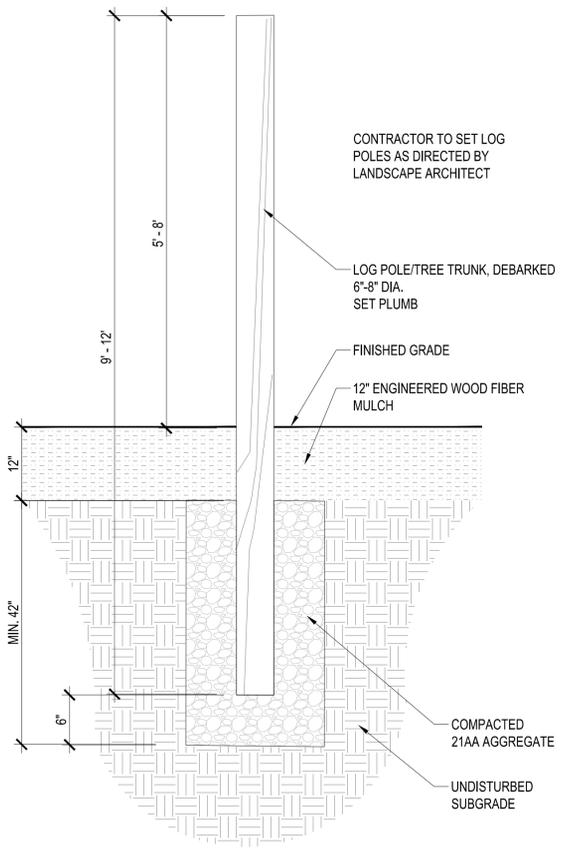
**3**  
**8** TIMBER BRIDGE  
NOT TO SCALE

**NOTES:**

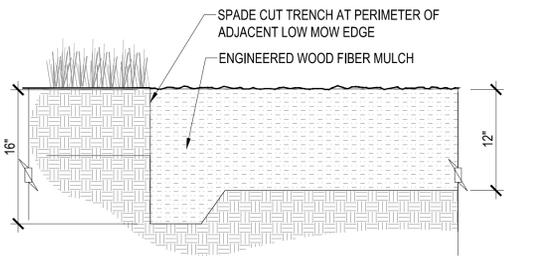
1. SURFACE LIMESTONE FINES
2. BASE AGGREGATE MDOT 22A OR SIMILAR TO BE USED AS DIRECTED BY LANDSCAPE ARCHITECT.
3. GEOTEXTILE FABRIC TO BE USED AS DIRECTED BY LANDSCAPE ARCHITECT.
4. EDGING SHALL BE STEEL- $\frac{1}{2}$ " X 5" TYP.
5. MIN. LIMESTONE FINES DEPTH 4"
6. VERIFY PATH WIDTH - SEE PLANS
7. MIN. 1.5%, MAX. 2% CROSS SLOPE TO DRAIN
8. CONTRACTOR TO PERFORM POST-INSTALLATION TESTING OF FINISHED SURFACING IN ACCORDANCE WITH ASTM 1951-09B - DETERMINATION OF ACCESSIBILITY OF SURFACE SYSTEMS UNDER AND AROUND PLAYGROUND EQUIPMENT REQUIREMENTS. SUBMIT COMPLIANCE, CERTIFIED PAPER WORK FROM TESTING AGENCY TO LANDSCAPE ARCHITECT.



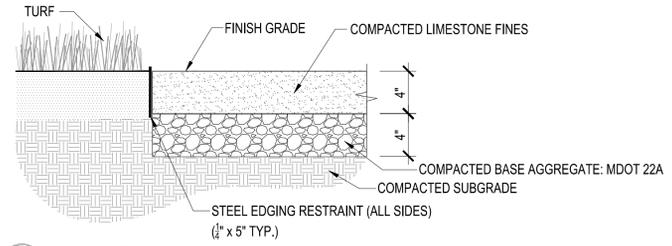
**6**  
**8** PROPOSED CONCRETE PAD  
NOT TO SCALE



**7**  
**8** VERTICAL LOG POLE  
NOT TO SCALE



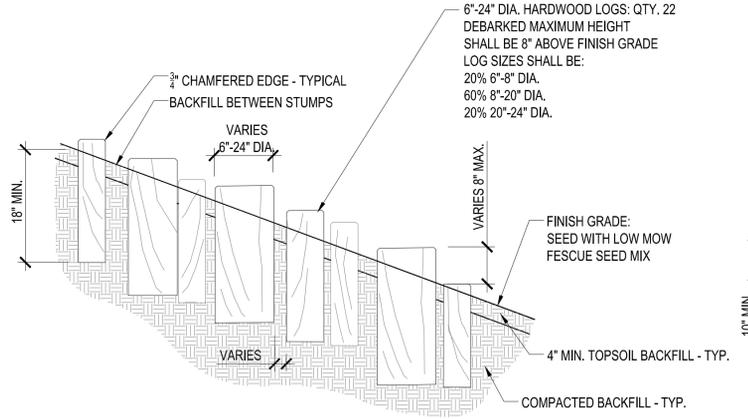
**4**  
**8** ENGINEERED WOOD FIBER MULCH BED  
NOT TO SCALE



**5**  
**8** LIMESTONE FINES  
NOT TO SCALE

**STUMP NOTES:**

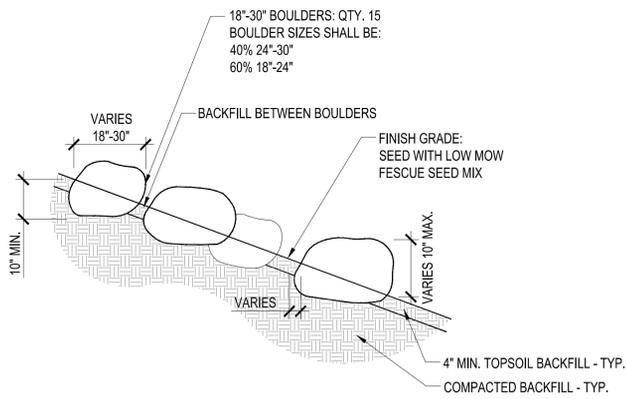
1. MAINTAIN A MINIMUM 18" BELOW GRADE DEPTH.
2. SPACE LOGS APPROXIMATELY 8-24" APART ON A RANDOM BASIS.
3. ALL "STUMP CLIMB" LOCATIONS TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. THE TOP OF STUMPS SHOULD BE SANDED TO SMOOTH FINISH WITH A  $\frac{3}{8}$ " CHAMFERED EDGE.
5. BACKFILL HOLES IN 1' LIFTS. COMPACT EACH FIRMLY AROUND STUMP.



**8**  
**8** STUMP/BOULDER SCRAMBLE CLIMB  
NOT TO SCALE

**BOULDER NOTES:**

1. MAINTAIN A MINIMUM 10" BELOW GRADE DEPTH.
2. SPACE BOULDERS APPROXIMATELY 8-24" APART ON A RANDOM BASIS.
3. ALL "BOULDER CLIMB" LOCATIONS TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. BACKFILL HOLES IN 1' LIFTS. COMPACT EACH FIRMLY AROUND BOULDER.
5. CONTRACTOR TO OBTAIN FLAT FACED BOULDERS TO THE EXTENT POSSIBLE - FLAT SIDE FACES UP.



3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171

EGLE PERMIT APPLICATION	06-16-21
95% CDS./BID SET	04-29-21
50% CONSTRUCTION DOCS.	04-09-21
200790 ECT PROJECT NUMBER	
DESIGNED BY	CHECKED BY
DRAWN BY	APPROVED BY

DETAILS

NOT TO SCALE

NORTH

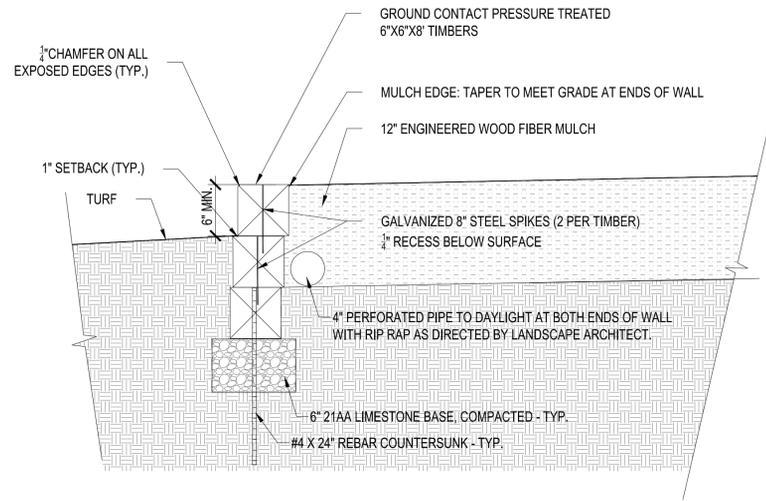
SHEET NUMBER

**8**

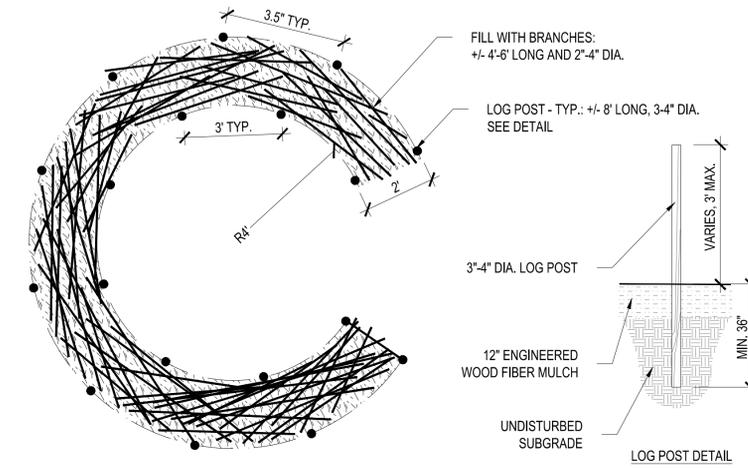
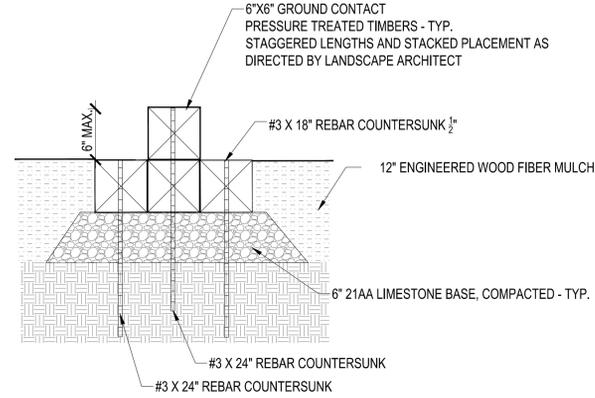
EGLE-WH

Approved

Expires On: 10/19/2021



NOTES:  
 1. CONTRACTOR TO SUBMIT SHOP DRAWING FOR APPROVAL BY LANDSCAPE ARCHITECT.  
 2. ALL FASTENERS TO BE FULLY EMBEDDED IN FINAL CONSTRUCTION.

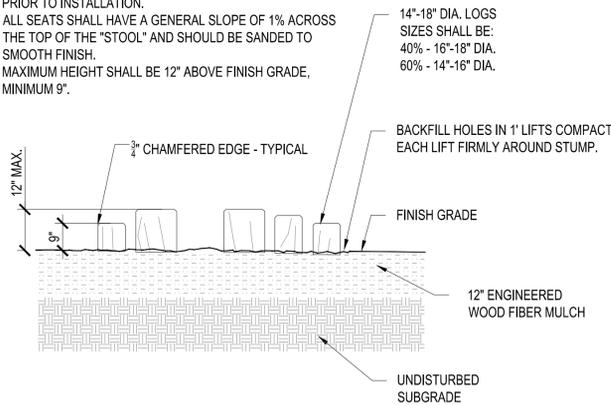


**1**  
**9** **TIMBER WALL**  
NOT TO SCALE

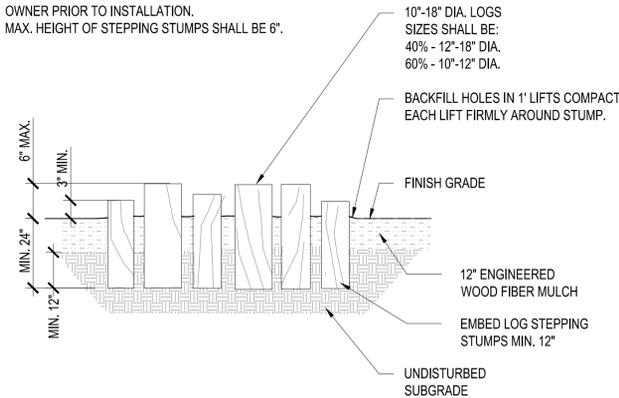
**2**  
**9** **TIMBER BALANCE BEAM**  
NOT TO SCALE

**3**  
**9** **STICK NEST**  
NOT TO SCALE

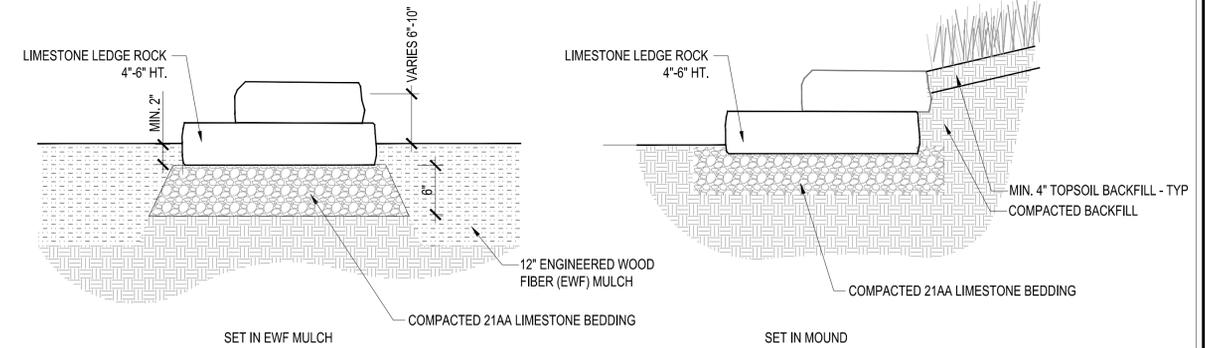
NOTES:  
 1. MAINTAIN A MINIMUM 36" BELOW GRADE DEPTH.  
 2. SPACE LOGS APPROXIMATELY AS DIRECTED BY LANDSCAPE ARCHITECT.  
 3. ALL "STOOL" LOCATIONS TO BE FIELD VERIFIED BY OWNER PRIOR TO INSTALLATION.  
 4. ALL SEATS SHALL HAVE A GENERAL SLOPE OF 1% ACROSS THE TOP OF THE "STOOL" AND SHOULD BE SANDED TO SMOOTH FINISH.  
 5. MAXIMUM HEIGHT SHALL BE 12" ABOVE FINISH GRADE, MINIMUM 9".



NOTES:  
 1. MAINTAIN A MINIMUM 18" BELOW GRADE DEPTH.  
 2. SPACE STEPPING STUMPS APPROXIMATELY 6"-12" APART AS DIRECTED BY LANDSCAPE ARCHITECT.  
 3. ALL STEPPING STUMP LOCATIONS TO BE FIELD VERIFIED BY OWNER PRIOR TO INSTALLATION.  
 4. MAX. HEIGHT OF STEPPING STUMPS SHALL BE 6".



NOTES:  
 1. LIMESTONE LEDGE ROCK SHALL BE +/- 3'-5' IN LENGTH, OR AS APPROVED BY LANDSCAPE ARCHITECT.  
 2. CONTRACTOR SHALL VERIFY ALL LIMESTONE LEDGE ROCK LOCATIONS WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.



**4**  
**9** **STUMP STOOLS**  
NOT TO SCALE

**5**  
**9** **LOG STEPPING STUMPS**  
NOT TO SCALE

**6**  
**9** **LIMESTONE LEDGE ROCK**  
NOT TO SCALE

**PRESCHOOL  
PLAYGROUND  
IMPROVEMENTS**

CITY OF ANN ARBOR,  
MICHIGAN

EGLE PERMIT APPLICATION	06-16-21
95% CDS/BID SET	04-29-21
50% CONSTRUCTION DOCS.	04-09-21
200790 ECT PROJECT NUMBER	
DESIGNED BY	CHECKED BY
DRAWN BY	APPROVED BY

**DETAILS**

NOT TO SCALE

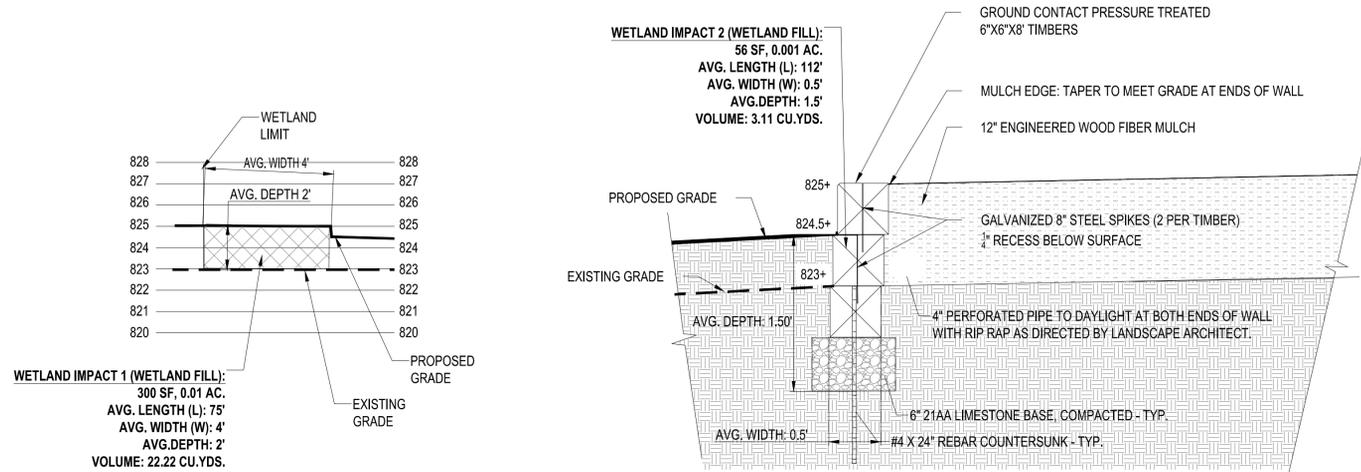
NORTH

SHEET NUMBER  
**9**

EGLE-WH  
WORKSHEET 198

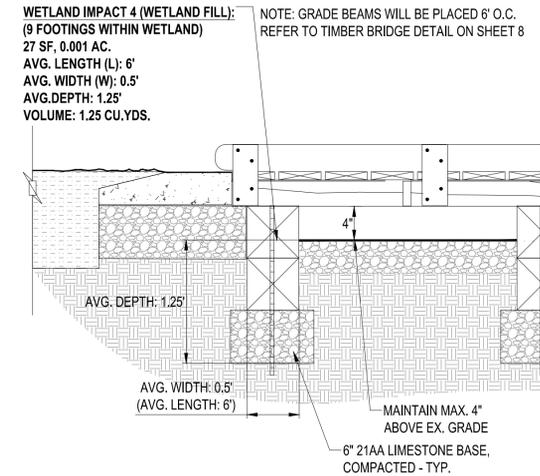
3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171



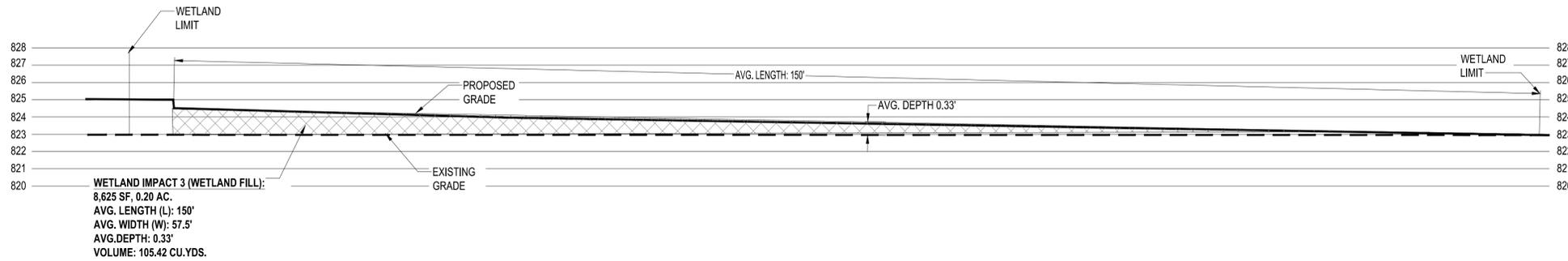


**1**  
**11** WETLAND IMPACT 1: TIMBER WALL FILL  
NOT TO SCALE

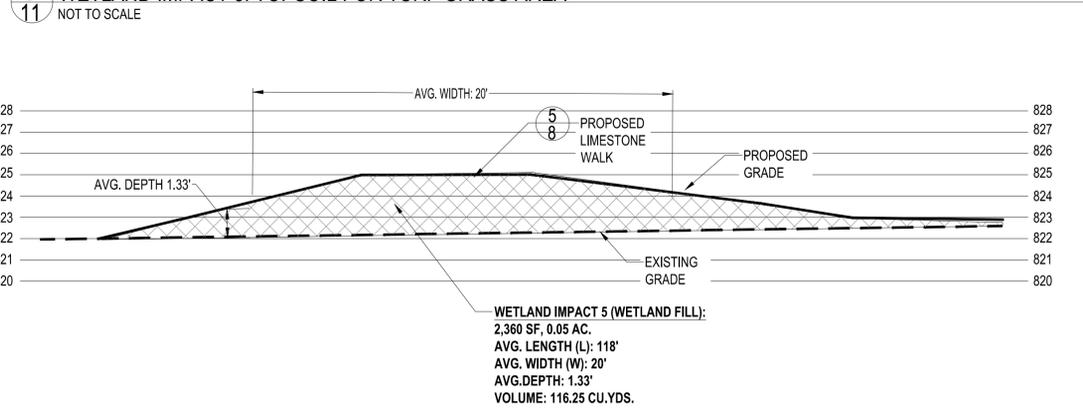
**2**  
**11** WETLAND IMPACT 2: TIMBER WALL  
NOT TO SCALE



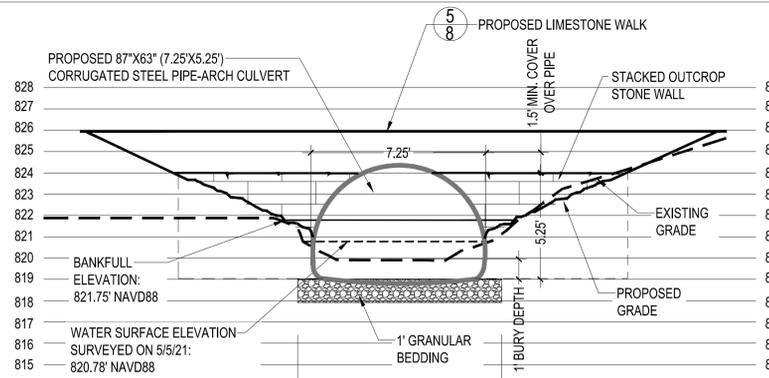
**4**  
**11** WETLAND IMPACT 4: TIMBER BRIDGE FOOTINGS  
NOT TO SCALE



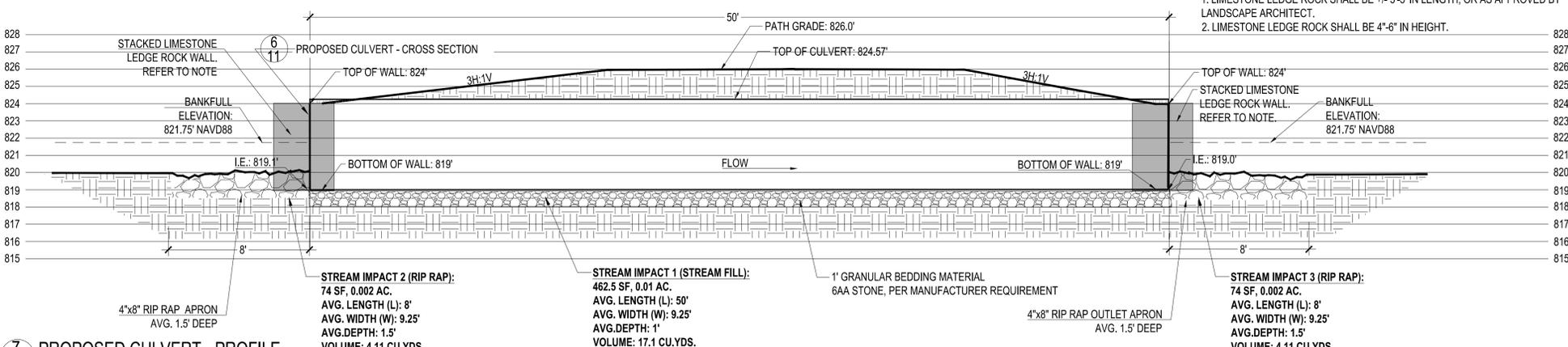
**3**  
**11** WETLAND IMPACT 3: TOPSOIL FOR TURF GRASS AREA  
NOT TO SCALE



**5**  
**11** WETLAND IMPACT 5: FILL FOR PROPOSED LIMESTONE WALK/CULVERT CROSSING  
NOT TO SCALE

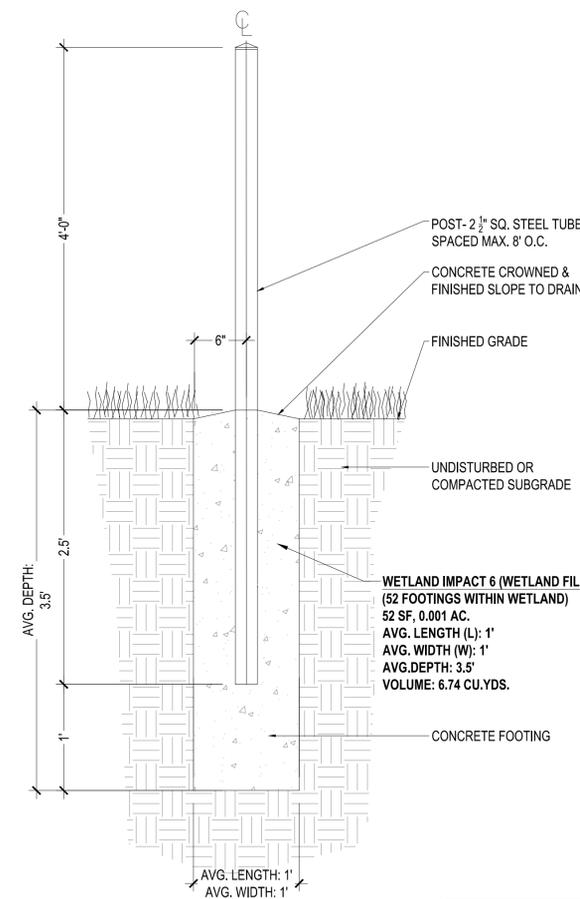


**6**  
**11** PROPOSED CULVERT - CROSS SECTION  
NOT TO SCALE



**7**  
**11** PROPOSED CULVERT - PROFILE  
NOT TO SCALE

NOTES:  
1. LIMESTONE LEDGE ROCK SHALL BE +/- 3'-5' IN LENGTH, OR AS APPROVED BY LANDSCAPE ARCHITECT.  
2. LIMESTONE LEDGE ROCK SHALL BE 4"-6" IN HEIGHT.



**8**  
**11** WETLAND IMPACT 6 - FENCE POST FOOTINGS  
NOT TO SCALE

3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171

EGLE PERMIT APPLICATION REV 10-11-21	ECT PROJECT NUMBER
EGLE PERMIT APPLICATION REV 07-28-21	DESIGNED BY
EGLE PERMIT APPLICATION 06-16-21	CHECKED BY
95% CDS./BID SET 04-29-21	MP
50% CONSTRUCTION DOCS. 04-09-21	PJ
	DRAWN BY
	APPROVED BY

**WETLAND  
IMPACT AND  
CULVERT  
CROSS SECTIONS**

NOT TO SCALE