SHEET SCHEDULE **LEGEND** 2020 PLAYGROUND IMPROVEMENTS -**EX. ELECTRICAL HAND HOLE** 1 Eagle Trace Park EX. ELECTRICAL PEDESTAL EX. TELEPHONE PEDESTAL **GROUP 1** 1.1 Project Location & Site Access **EX. TREE** 1.2 Existing Conditions EX. WATER HYDRANT **MUNIS NUMBERS:** 1.3 Demolition & Protection Plan EX. WATER VALVE 1.4 Site Plan EX. PROPERTY LINE 11969-51-130 & 12676-51-130 1.5 Grading and Erosion Control Plan EX. EASEMENT 1.6 Design Compututations EX. FENCE LINE 2 Hillington Green Park EX. TREE LINE 2.1 Project Location & Site Access EX. CONTOUR (INDEX) 2.2 Existing Conditions EX. CONTOUR (INTER) 2.3 Demo & Protection Plan EX. ABANDONED UTILITY 2.4 Site Plan EX. ELECTRIC PROJECT: 2.5 Grading & Erosion Control Plan EX. FIBER OPTIC 2.6 Design Compututations EX. NATURAL GAS 3 Wingra Park EX. OVERHEAD LINE EX. SANITARY SEWER 3.1 Project Location & Site Access EX. STORM SEWER 3.2 Existing Conditions EX. CABLE TV 3.3 Demolition & Protection Plan EX. UNDERGROUND TELEPHONE 3.4 Site Plan EX. WATER LINE 3.5 Grading and Erosion Control Plan EX. GRAVEL 3.6 Design Compututations EX. CONCRETE 3.7 Design Compututations 4 Details 4.1 Details - Playground & Pavement Edge .## PRO. SPOT ELEVATION 4.2 Details - Ornamental Metal Fencing PRO. CONTOUR (INDEX) PRO. CONTOUR (INTER) PRO. FENCE PRO. GRADING LIMITS PRO. SILT SOCK PRO. CONSTRUCTION FENCE DESIGNED BY (EAGLE TRACE & WINGRA PARK): PRO. STORM SEWER (UNDERDRAIN) DESIGNED BY (HILLINGTON GREEN PARK): PRO. ASPHALT HILLINGTON GREEN PARK PRO. WOOD MULCH 435 HILLINGTON WAY PRO. PEA GRAVEL WINGRA PARK PRO. CONCRETE 824 KNICKERBOCKER STREET PRO. CONSTRUCTION ENTRANCE PRO. BOULDER RETAINING WALL SARAH C. MICHAEL STURM SHEET TITLE: EAGLE TRACE PARK REMOVE EX. ASPHALT LA-580-14 LERNER 10321 WHITE FOX LN MADISON REMOVE EX. TOPSOIL 646-14 MADISON

City of Madison Department of Public Works **PARKS DIVISION**

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



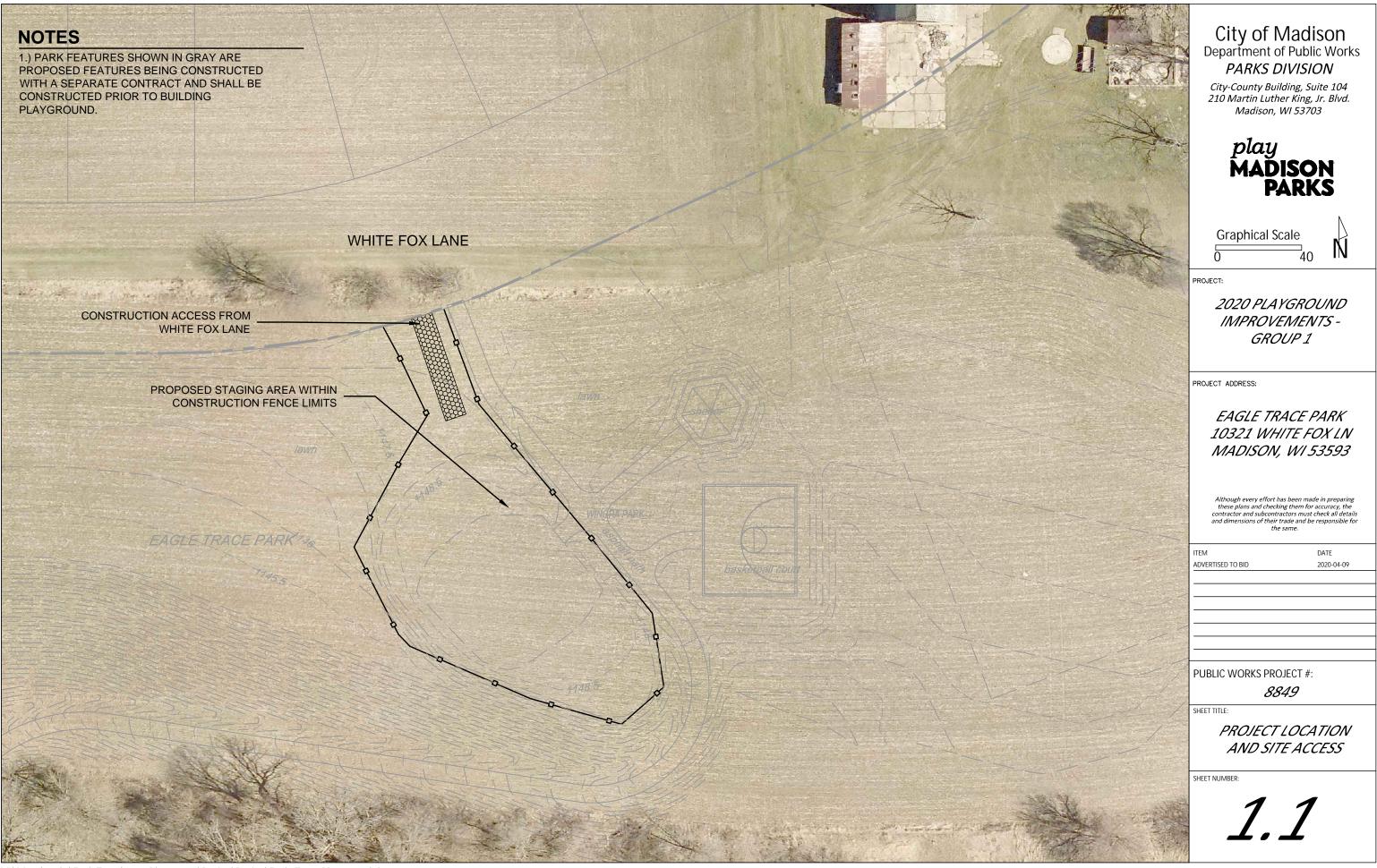


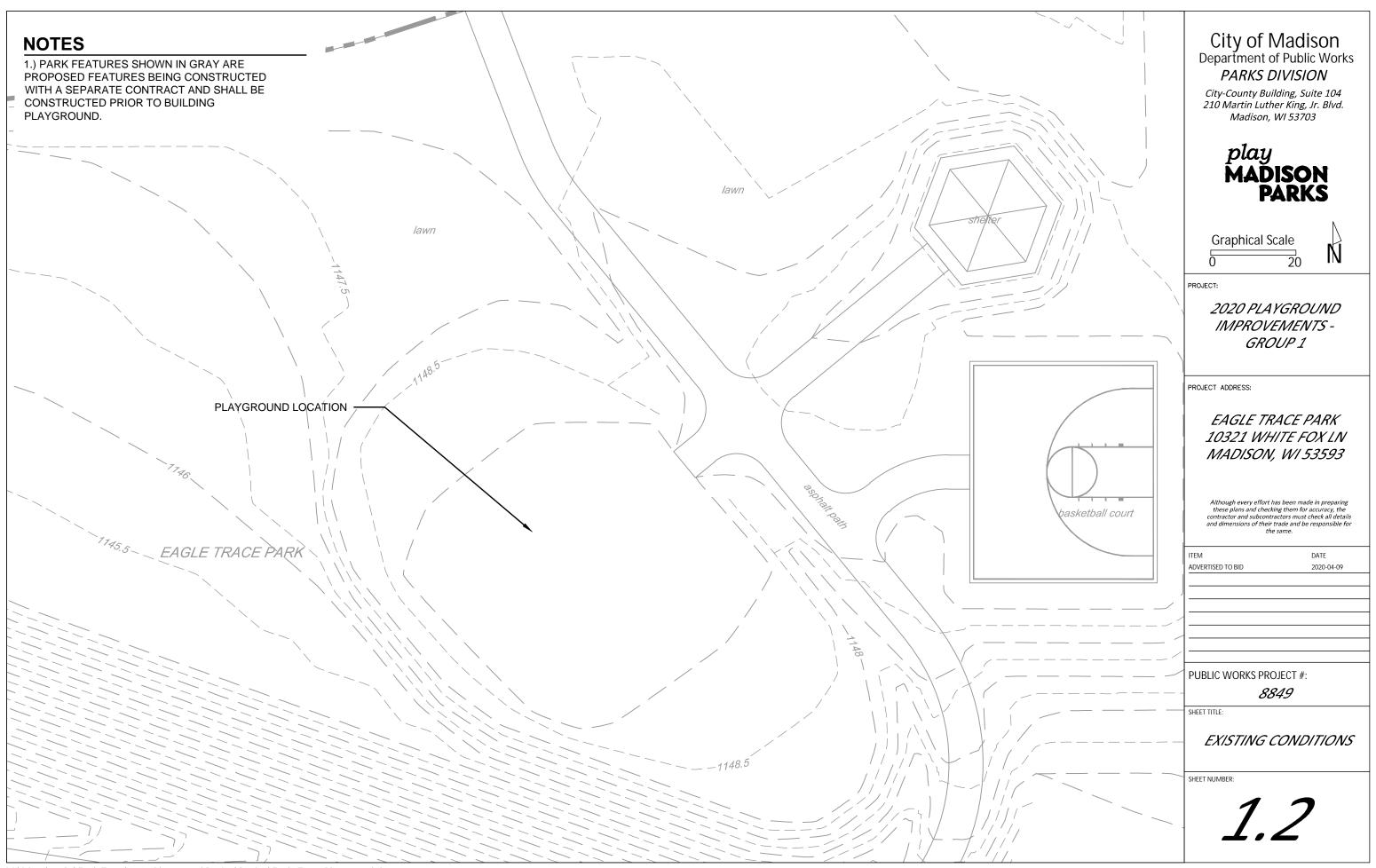
2020 PLAYGROUND IMPROVEMENTS -GROUP 1

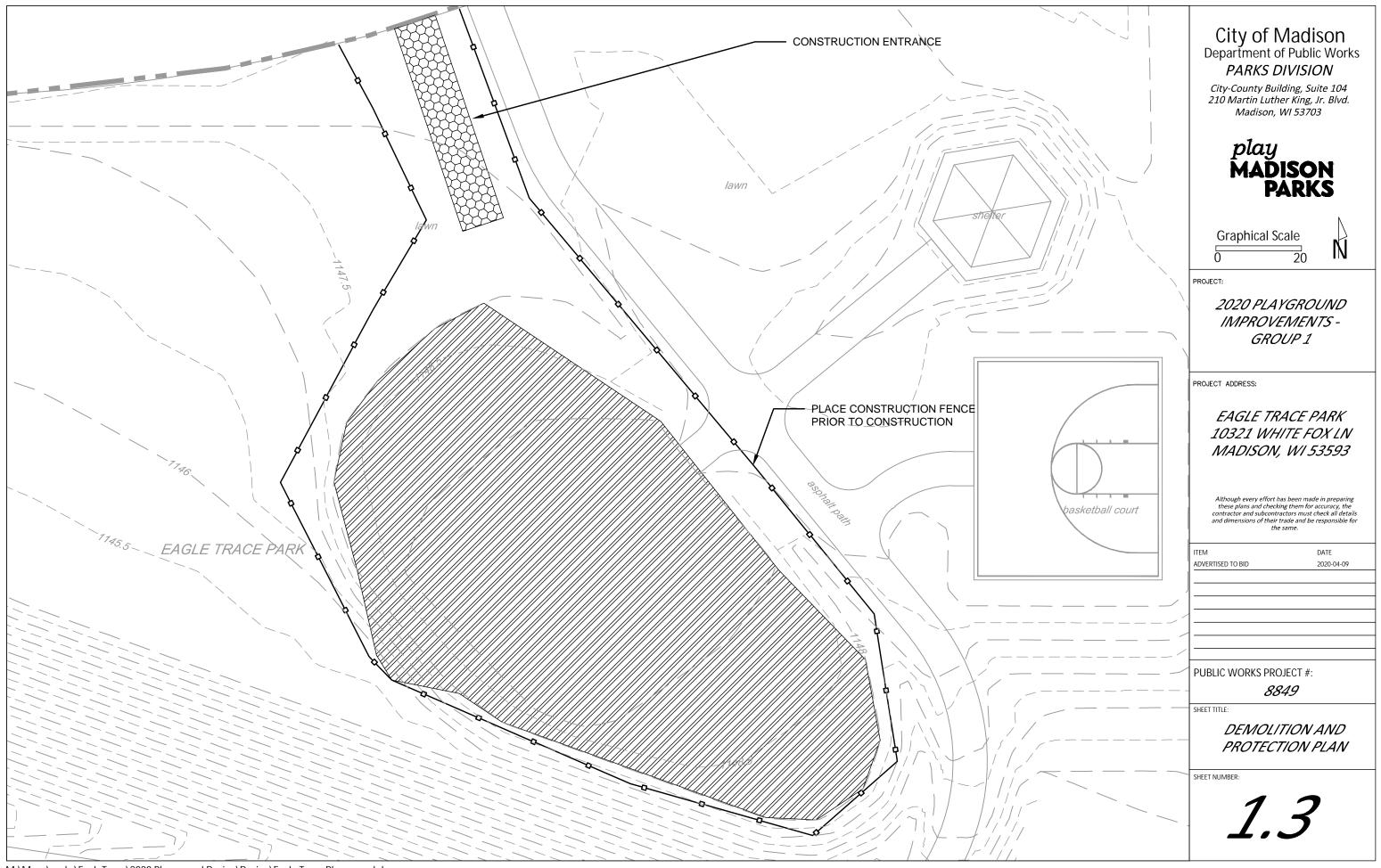
Although every effort has been made in preparing these plans and checking them for accuracy, the ontractor and subcontractors must check all details nd dimensions of their trade and be responsible for

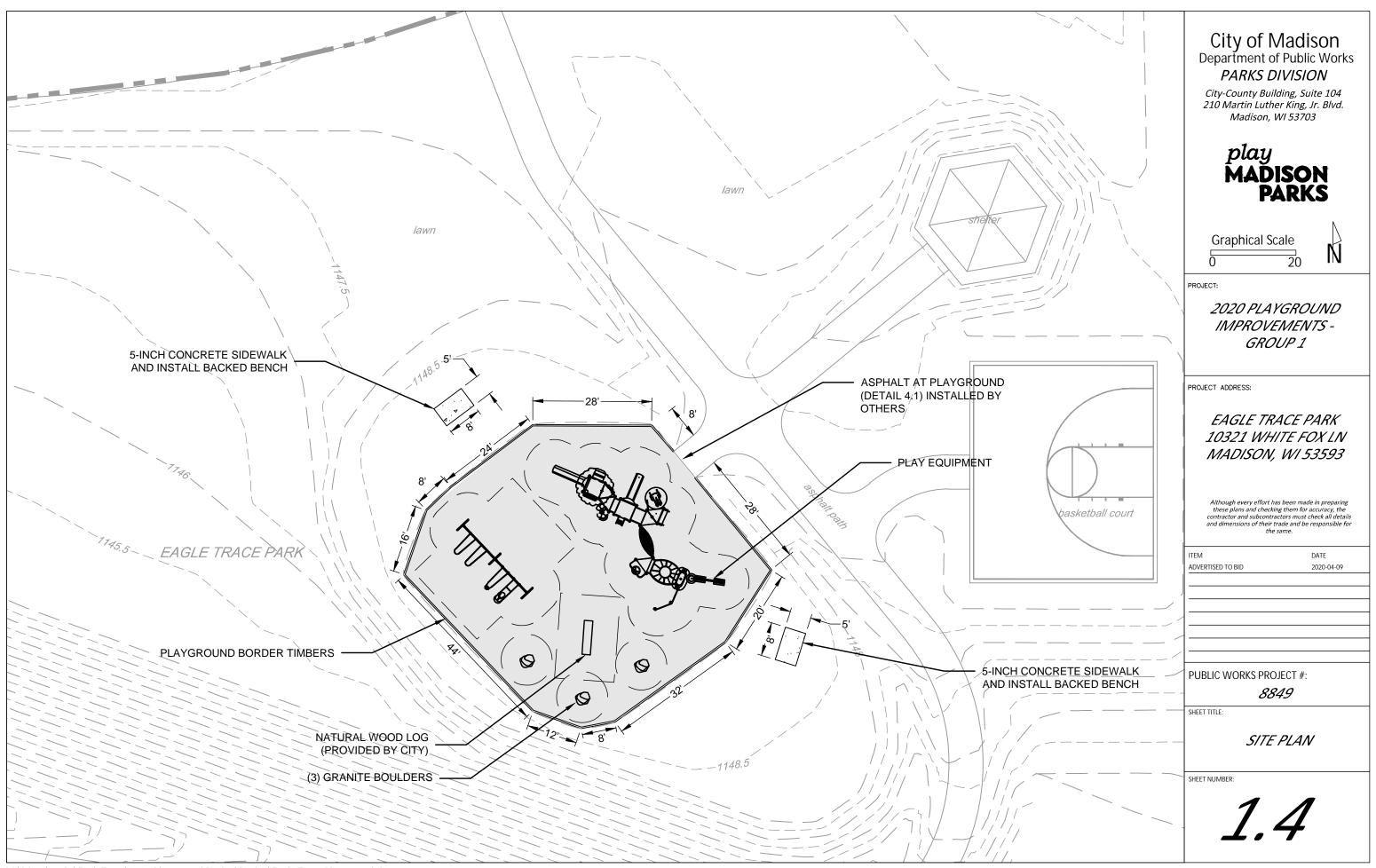
ADVERTISED TO BID	2020-04-09
PUBLIC WORKS PROJI	ECT #:
8810	7

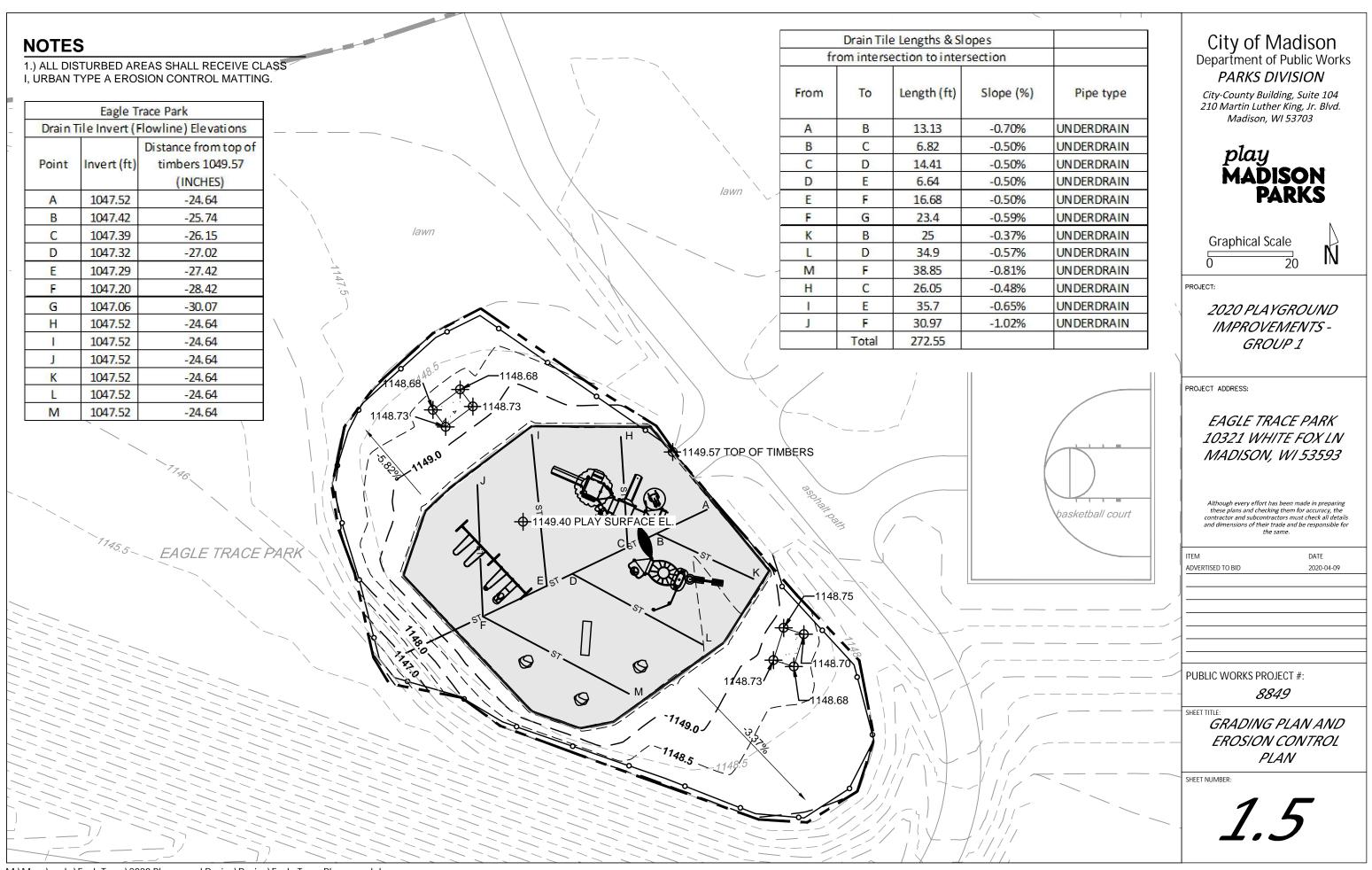
COVER SHEET











Eagle Trace Playground

City of Madison Public Works Contract
Date Revised: 3/3/202

Notes:

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Sort	<i>Grp</i> Grass to	Material	ltem	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac- tored volume (cu ft)	Unfac- tored volume (cu yd)	Expan- sion Factor (%)	Factored (Uncom- pacted) Volume (cu yd)
1.1	Grass	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	3117.98	0.50	1558.99	57.7	0%	57.7
	Grass to	Topoon Exouvate	Cut subsoil to proposed	1174	11/4	0117.00	0.00	1000.00	07.7	070	07.7
1.2		Subsoil Excavate	subgrade	Ex-6in	Pro-6in	3117.98	varies	76.99	2.9	0%	2.9
	Grass to		Fill subsoil to proposed								
1.3	Grass	Subsoil Place	subgrade	Ex-6in	Pro-6in	3117.98	varies	-960.76	-35.6	0%	-35.6
	Grass to		g								
1.4		Topsoil Place	Place 6" topsoil	n/a	n/a	3117.98	-0.50	-1558.99	-57.7	0%	-57.7
	Grass to 5-										
2.1	inch Concrete	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	80.00	0.50	40.00	1.5	0%	1.5
	Grass to 5-		Cut subsoil to proposed								
2.2	inch Concrete	Subsoil Excavate	subgrade	Ex-6in	Pro-8inch	80.00	∨aries	0.81	0.0	0%	0.0
	Grass to 5-		Fill subsoil to proposed								
2.3	inch Concrete	Subsoil Place	subgrade	Ex-6in	Pro-8inch	80.00	varies	-0.61	0.0	0%	0.0
	Grass to 5-										
2.4	inch Concrete	Concrete Place	Place 5"of concrete	n/a	n/a	80.00	-0.41	-32.80	-1.2	0%	-1.2
	Grass to 5-										
2.5	inch Concrete	Gravel Place (Concrete)	Place 3" of gravel	n/a	n/a	80.00	-0.25	-20.00	-0.7	0%	-0.7
	Grass to play										
3.1		Topsoil Excavate	Strip 6" topsoil	n/a	n/a	3998.50	0.50	1999.25	74.0	0%	74.0
	Grass to play		Cut subsoil to proposed		Pro-12						
3.2	surface	Subsoil Excavate	subgrade	Ex-6in	inch	3998.50	∨aries	385.93	14.3	0%	14.3
	Grass to play		Fill subsoil to proposed		Pro-12						
3.3		Subsoil Place	subgrade	Ex-6in	inch	3998.50	∨aries	-3.15	-0.1	0%	-0.1
		Play Surface Place (Wood									
3.4		Mulch)	Place 14" of wood mulch	n/a	n/a	3998.50	-1.17	-4666.25	-172.8	0%	-172.8
	Grass to										
4.1		Topsoil Excavate	Strip 6" topsoil	n/a	n/a	76.46	0.50	38.23	1.4	0%	1.4
	Grass to		Cut subsoil to proposed								
4.2		Subsoil Excavate	subgrade	Ex-6in	Pro-12in	76.46	varies	0.00	0.0	0%	0.0
	Grass to	L <u>.</u> .	Fill subsoil to proposed			,_				 	
4.3	Timbers	Subsoil Place	subgrade	Ex-6in	Pro-12in	76.46	varies	-5.11	-0.2	0%	-0.2
	l <u>.</u> .	L	Place playground border								
	Grass to		timbers (placeholder volume				l			 	
4.4	Timbers	(placeholder volume)	to balance volume comps)	n/a	na	76.46	-1.00	-76.46	-2.8	0%	-2.8
			of asphalt ramp gravel base								
			volume = 1/2 x (2.25 ft x 9 ft								
5.1	Adjust	Play Surface Place	x 7 in)	n/a	n/a	9	-0.29	-3	-0.1	0%	-0.1

Computation Summary

Positive volumes are cuts (material available), negative volumes are fills (material needed)

	Sum of Factored (Uncompacted)
Row Labels	Volume (cu yd)
Subsoil Excavate	17.2
Subsoil Place	-35.9
Topsoil Excavate	134.7
Topsoil Place	-57.7
Concrete Place	-1.2
Gravel Place (Concrete)	-0.7
Play Surface Place (Wood Mulch)	-148.1
Border Timbers Place (placeholder volume)	-2.8
Grand Total	-94.7

Reorganized into bid table items

			Relation to
Bid Item	Quantity	Units	Table Above
			= Subsoil
			Excavate +
20101 Excavation Cut	152	CY	Topsoil Excavate
			= Subsoil
			Excavate +
20202 Fill - Borrow	19	CY	Subsoil Place
			= (Topsoil
20221 Topsoil	346	SY	Place)/167
			= Play Surface
90003 Playground Surfacing - Wood Fiber			Place (Wood
Mulch	177.7	CY	Mulch * -1.2)

City of Madison Department of Public Works PARKS DIVISION

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

EAGLE TRACE PARK 10321 WHITE FOX LN MADISON, WI 53593

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

DATE
2020-04-09

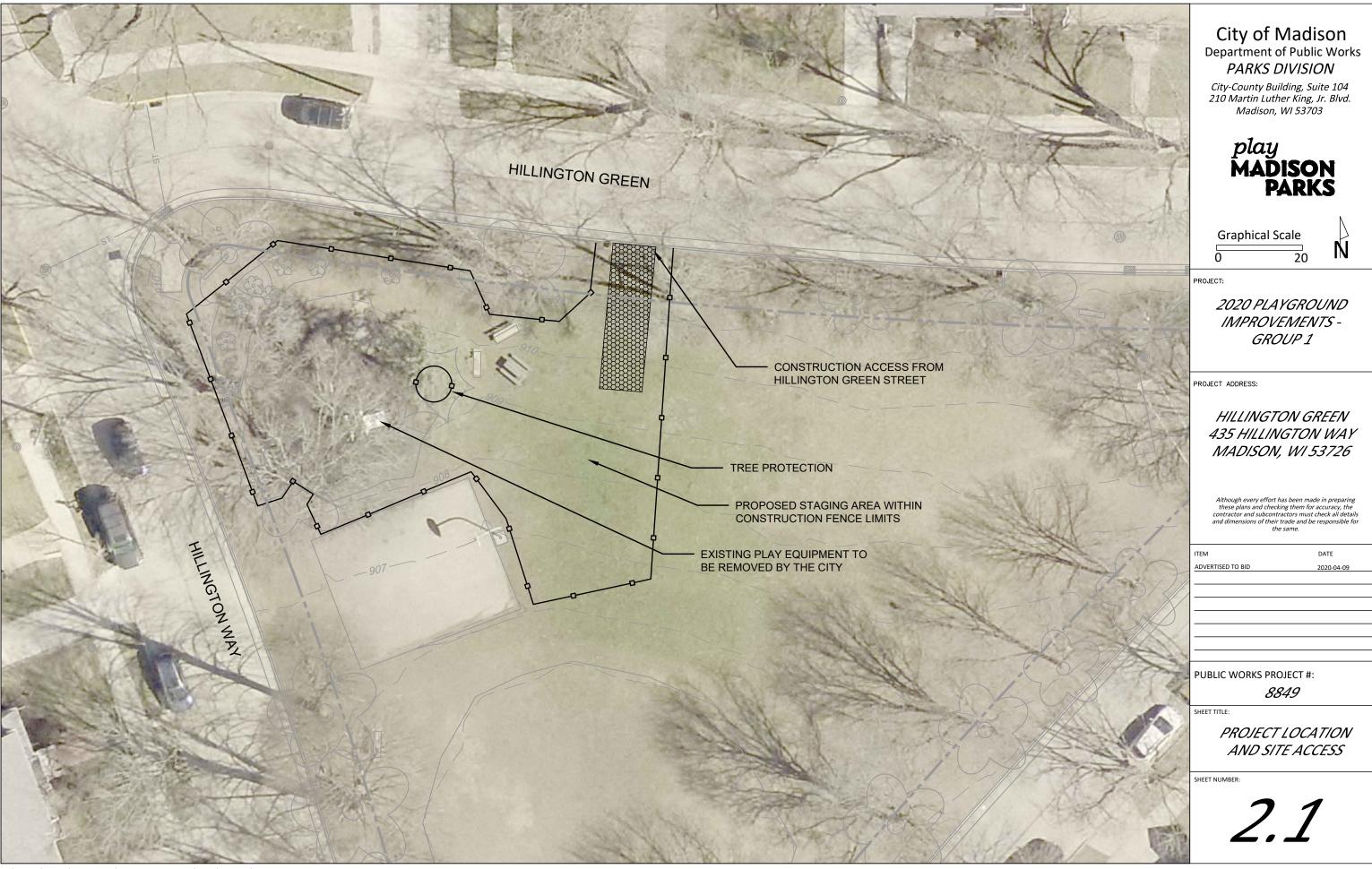
PUBLIC WORKS PROJECT #:

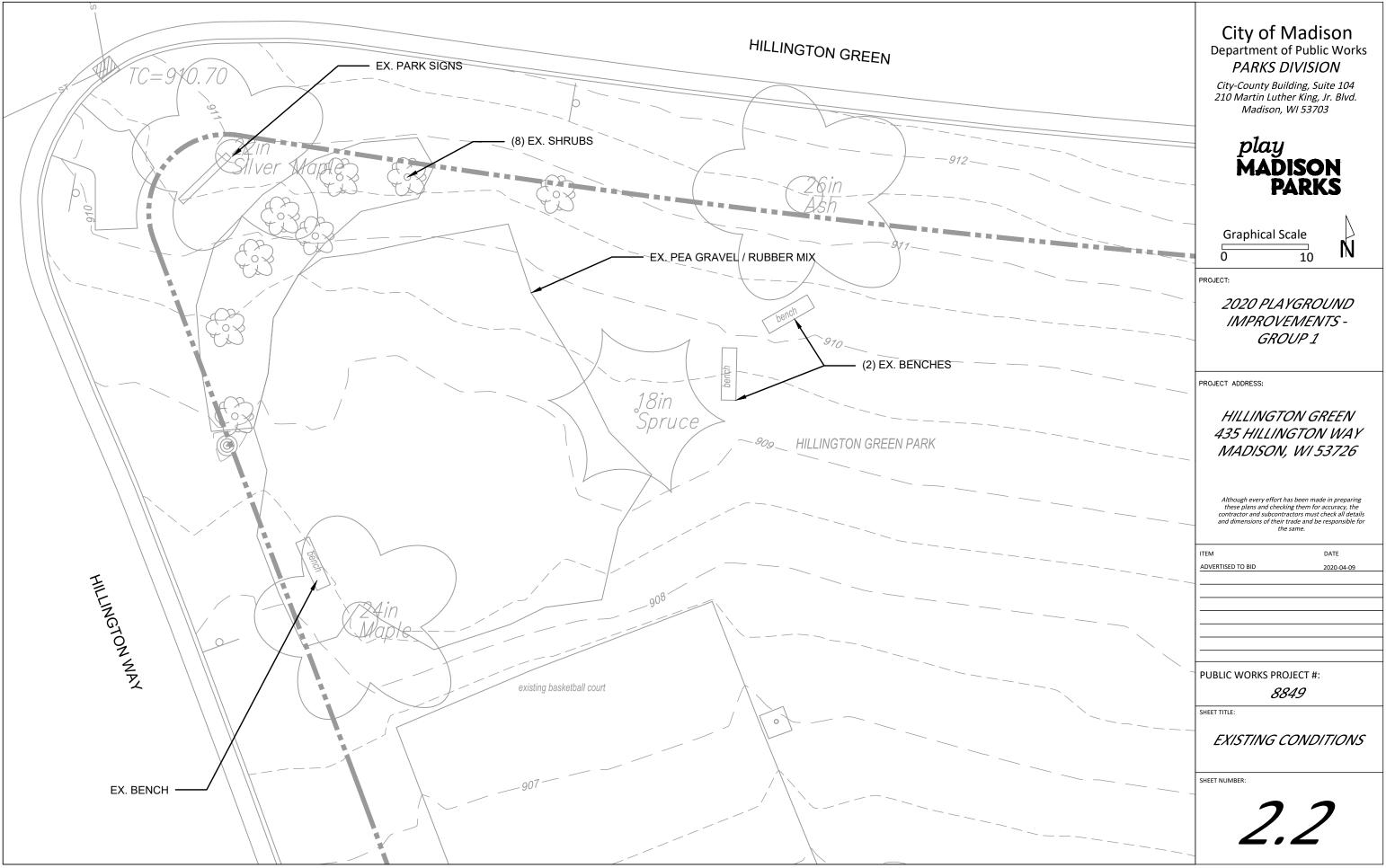
8849

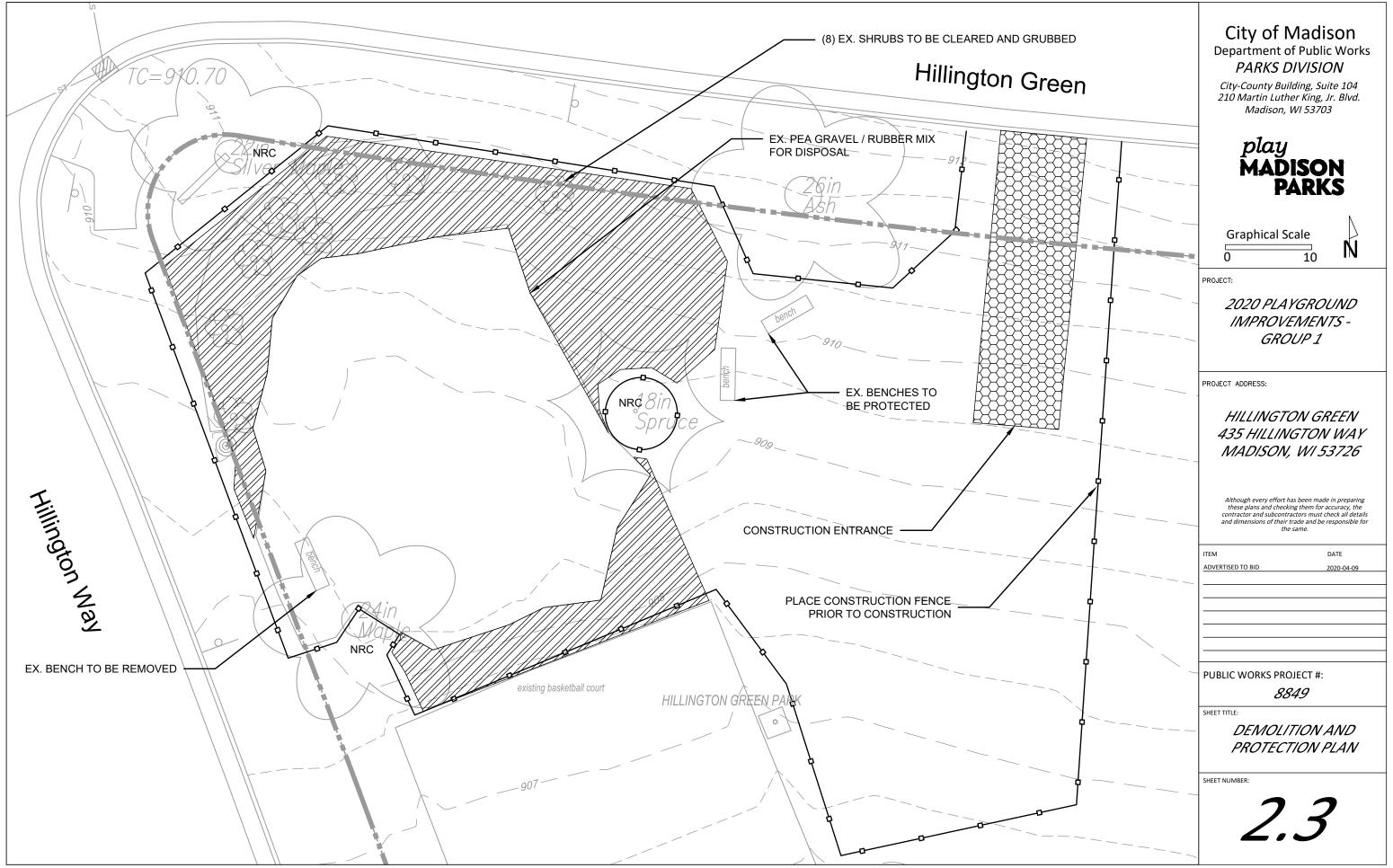
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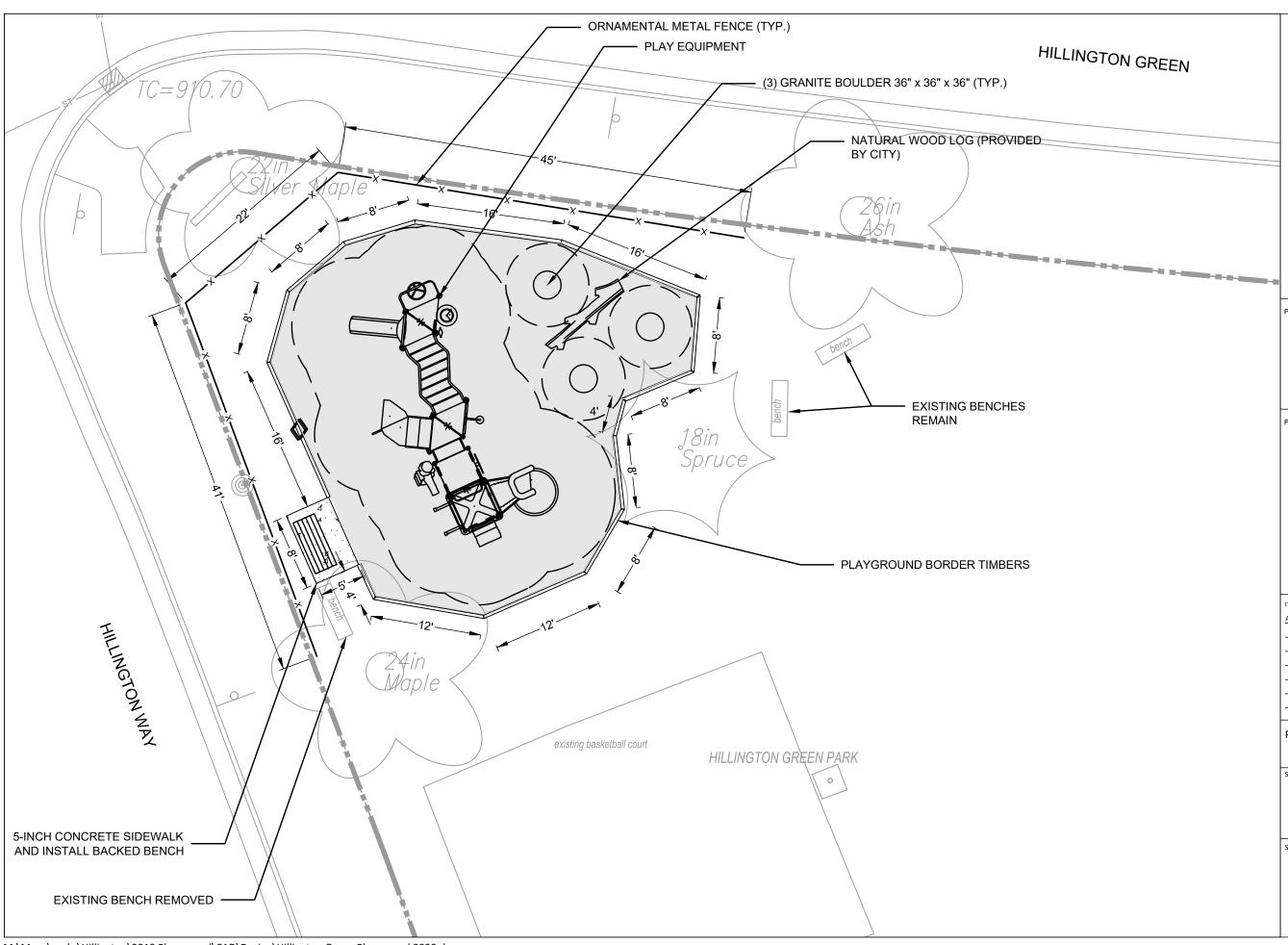
DESIGN COMPUTATIONS

SHEET NUMBER:









City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



Graphical Scale 0 10 N

PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

HILLINGTON GREEN 435 HILLINGTON WAY MADISON, WI 53726

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DATE

ADVERTISED TO BID 2020-04-09

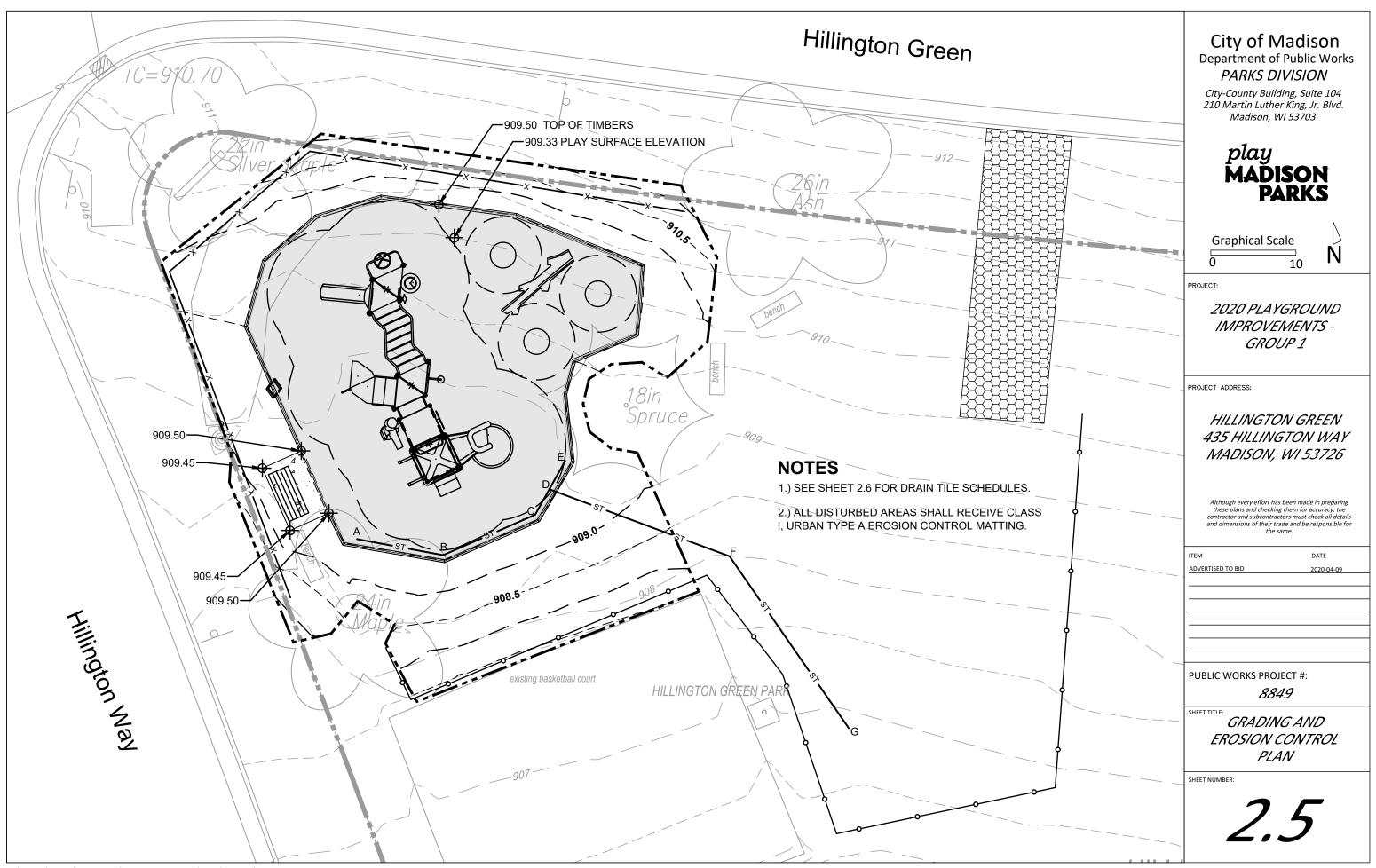
PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

SITE PLAN

SHEET NUMBER:



Hillington Green Playground

City of Madison Public Works Contract
Date Revised: 3/25/20

Positive volumes are cuts, negative volumes are fills.

Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Sort	Grp	Material	<i>l</i> tem	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac- tored volume (cu ft)	Unfac- tored volume (cu yd)	Expan- sion Factor (%)	Factored (Uncom- pacted) Volume (cu yd)
1.1	Grass to Grass	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	1022.65	0.50	511.33	18.9	0%	18.9
1.2	Grass to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	1022.65	varies	211.76	7.8	0%	7.8
1.3	Grass to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	1022.65	varies	-22.06	-0.8	0%	-0.8
1.4	Grass to Grass	Topsoil Place	Place 6" topsoil	n/a	n/a	1022.65	-0.50	-511.33	-18.9	0%	-18.9
2.1	Grass to play surface	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	290.90	0.50	145.45	5.4	0%	5.4
2.2	Grass to play surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro- 12inch	290.90	varies	326.80	12.1	0%	12.1
	Grass to play		Fill subsoil to proposed		Pro-12	290.90					
2.3	surface Grass to play	Subsoil Place Play Surface Place (Wood	subgrade	Ex-6in	inch		varies	0.00	0.0	0%	0.0
2.4	surface Grass to	Mulch)	Place 12" of wood mulch	n/a	n/a	290.90	-1.00	-290.90	-10.8	0%	-10.8
3.1	Timbers Grass to	Topsoil Excavate	Strip 6" topsoil Cut subsoil to proposed	n/a	n/a	25.10	0.50	12.55	0.5	0%	0.5
3.2	Timbers Grass to	Subsoil Excavate	subgrade Fill subsoil to proposed	Ex-6in	Pro-12in	25.10	varies	25.68	1.0	0%	1.0
3.3	Timbers	Subsoil Place	subgrade	Ex-6in	Pro-12in	25.10	varies	0.00	0.0	0%	0.0
3.4	Grass to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	na	25.10	-1.00	-25.10	-0.9	0%	-0.9
4.1	Play surface to Grass	Play Surface Excavate	Remove existing play surface, estimated depth 17 in	n/a	n/a	457.00	1.42	647.42	24.0	0%	24.0
4.2	Play surface to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	457.00	varies	0.00	0.0	0%	0.0
4.3	Play surface to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-6in	457.00	varies	-564.00	-20.9	0%	-20.9
4.4	Play surface to Grass	Topsoil Place	Place 6" of topsoil	n/a	n/a	457.00	-0.50	-228.50	-8.5	0%	-8.5
4.4	Play surface	Topson Flace		IIV a	ii/a	407.00	-0.00	-220.00	-0.0	070	-0.0
5.1	to play surface Play surface	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	1063.44	1.42	1506.54	55.8	0%	55.8
5.2	to play surface Play surface to play	Subsoil Excavate	Cut subsoil to proposed subgrade Fill subsoil to proposed	Ex-17in	Pro-12in	1063.44	varies	11.58	0.4	0%	0.4
5.3	surface	Subsoil Place	subgrade	Ex-17in	Pro-12in	1063.44	varies	-702.63	-26.0	0%	-26.0
5.4	Play surface to play surface	Play Surface Place (Wood Mulch)	Place 12in wood mulch play surface	n/a	n/a	1063.44	-1.00	-1063.44	-39.4	0%	-39.4
6.1	Play surface to timbers Play surface	Play Surface Excavate	Remove existing play surface, estimated depth 17in Cut subsoil to proposed	n/a	n/a	14.88	1.42	21.08	0.8	0%	0.8
6.2	to timbers Play surface	Subsoil Excavate	subgrade Fill subsoil to proposed	Ex-17in	Pro-12in	14.88	varies	0.00	0.0	0%	0.0
6.3	to timbers	Subsoil Place	subgrade Place playground border	Ex-17in	Pro-12in	14.88	varies	-15.70	-0.6	0%	-0.6
6.4	Play surface to timbers	Border Timbers Place (placeholder volume)	timbers (placeholder volume to balance volume comps)	n/a	n/a	14.88	-1.00	-14.88	-0.6	0%	-0.6
7.1	Play surface to 5" Concrete	Play Surface Excavate	Remove existing play surface, estimated depth 17 in	n/a	n/a	41.32	1.42	58.54	2.2	0%	2.2
7.2	Play surface to 5" Concrete	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-7in	41.32	varies	0.00	0.0	0%	0.0
7.3	Play surface to 5" Concrete	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-7in	41.32	varies	-68.87	-2.6	0%	-2.6
7.4	Play surface to 5" Concrete	Concrete Place	Place 6" of concrete	n/a	n/a	41.32	-0.50	-20.66	-0.8	0%	-0.8
7.5	Play surface to 5" Concrete	Gravel Place	Place 2" of gravel base	n/a	n/a	41.32	-0.17	-6.90	-0.3	0%	-0.3
8.1	Play surface to timbers Play surface	Play Surface Excavate	Remove existing play surface, estimated depth 17 in Cut subsoil to proposed	n/a	n/a	14.88	1.42	21.08	0.8	0%	0.8
8.2	to timbers	Subsoil Excavate	subgrade Fill subsoil to proposed	Ex-17in	Pro-6in	14.88	varies	0.00	0.0	0%	0.0
8.3	Play surface to timbers	Subsoil Place	subgrade	Ex-17in	Pro-6in	14.88	varies	-15.76	-0.6	0%	-0.6
8.4	Play surface to timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	14.88	-1.00	-14.88	-0.6	0%	-0.6

Hillington Green Playground

City of Madison Public Works Contract Date Revised:03-19-20

Computation Summary

Positive volumes are cuts (material available), negative volumes are fills (material needed)

	Sum of
	Factored
	(Uncompa
	cted)
Row Labels	Volume
Subsoil Excavate	21.3
Subsoil Place	-50.9
Topsoil Excavate	24.8
Topsoil Place	-27.4
Concrete Place	-0.8
Gravel Place	-0.3
Play Surface Place (Wood Mulch)	-50.2
Border Timbers Place (placeholder volume)	-1.5
Play Surface Excavate	82.7
Grand Total	-2.1

Reorganized into bid table items

Bid Item	Quantity	Units	Relation to Table Above
			= Subsoil Excavate +
			Topsoil Excavate + Pavement
			Excavate + Concrete
20101 Excavation Cut	46	CY	Excavate
20104 Excavation Cut -Pea Gravel/Rubber			
Mix	83	CY	= Play Surface Excavate
			= Subsoil Excavate +
20202 Fill - Borrow	30	CY	Subsoil Place
20221 Topsoil	164	SY	= (Topsoil Place)/167
40102 Crushed Aggregate Base Course			= ((Gravel Place) pavement)
Gradation No. 2	1	tons	* -2 ton/cubic yard
90003 Playground Surfacing - Wood Fiber			= Play Surface Place (Wood
Mulch	60.2	CY	Mulch * -1.2)

	Hillingto	on Green							
Drain Tile	Invert (Flo	wline) Elevations							
		Distance from top of		Dra	Drain Tile Lengths & Slopes				
Point	Invert(ft)	timbers 909.33	from intersection to intersection						
		(INCHES)	From To L		Length (ft)	Slope (%)	Pipe type		
Α	908.00	1.33	Α	В	10.28	0.5%	UNDERDRAIN		
В	907.95	1.38	В	С	11.78	0.5%	UNDERDRAIN		
<u>C</u>	907.89	1.44	С	D	3.42	0.5%	UNDERDRAIN		
D	907.87	1.46	E	D	3.82	0.5%	UNDERDRAIN		
E	907.89	1.44 1.91		F	22.56	2.0%	UNDERDRAIN		
G G	906.88	2.45	F	G	24.5	2.2%	UNDERDRAIN		

City of Madison Department of Public Works **PARKS DIVISION**

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

HILLINGTON GREEN 435 HILLINGTON WAY MADISON, WI 53726

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
ADVERTISED TO BID	2020-04-09
-	

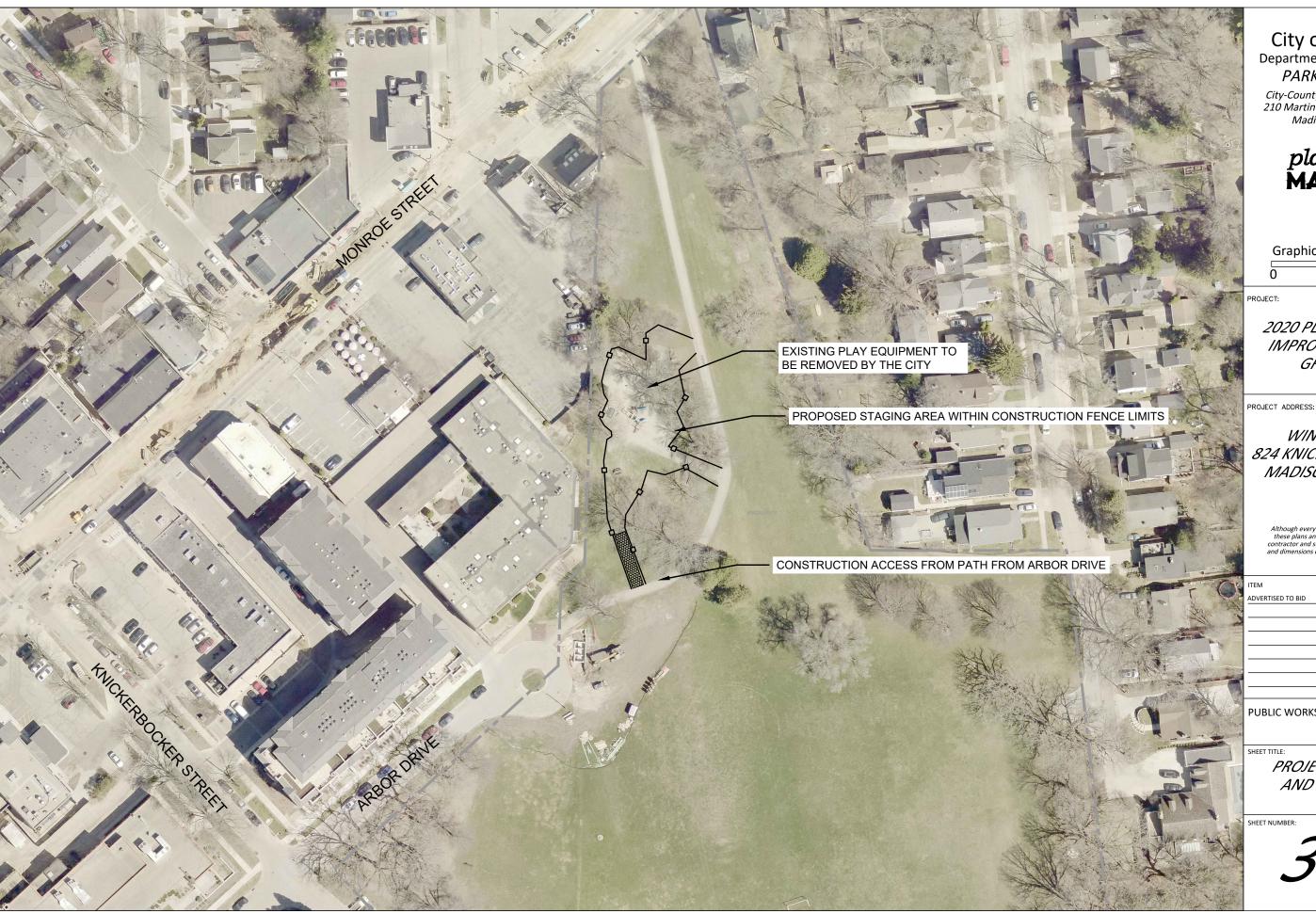
PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

DESIGN COMPUTATIONS

SHEET NUMBER:



City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



Graphical Scale 80

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

WINGRA PARK 824 KNICKERBOCKER ST. MADISON, WI 53711

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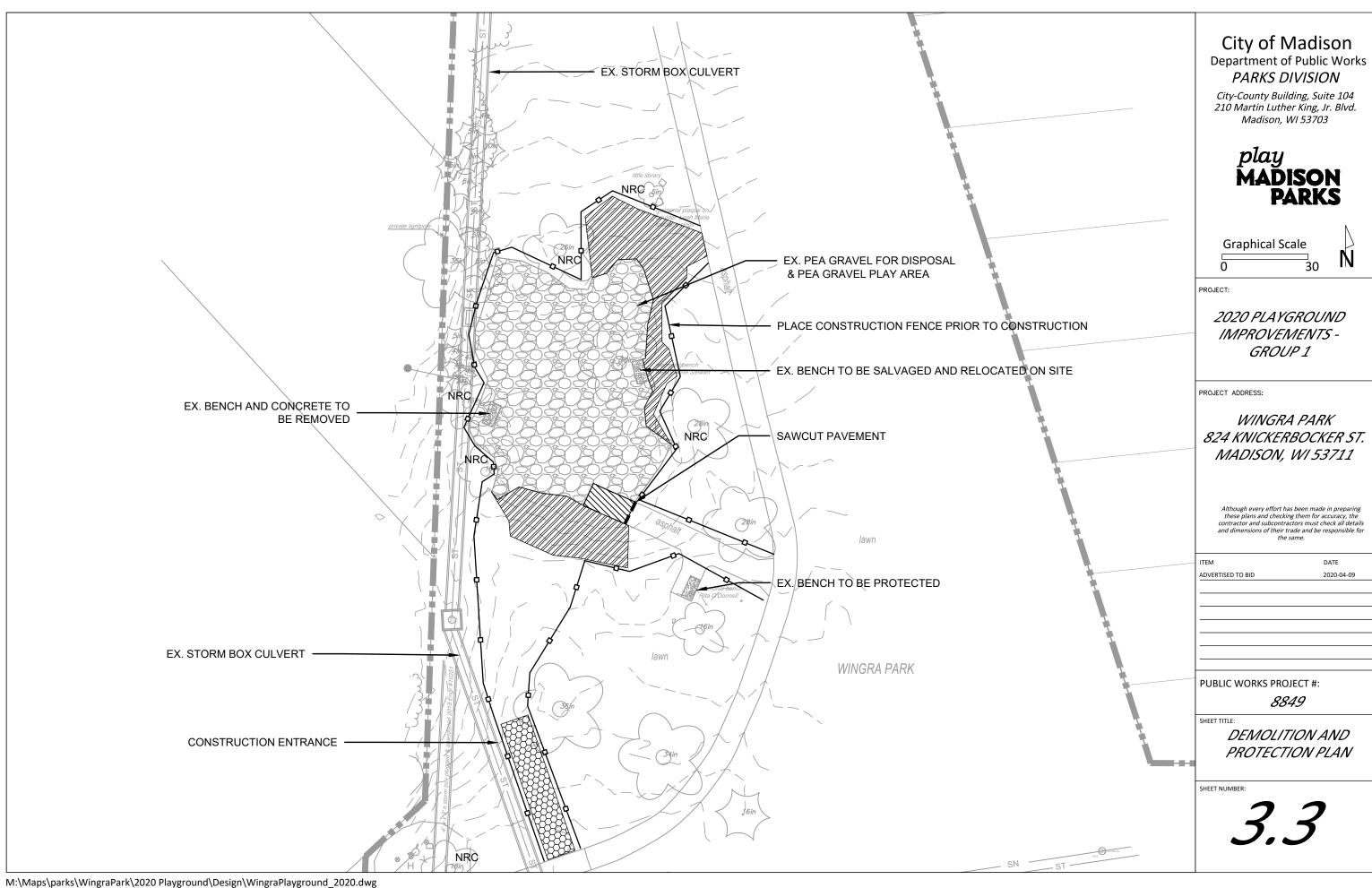
2020-04-09

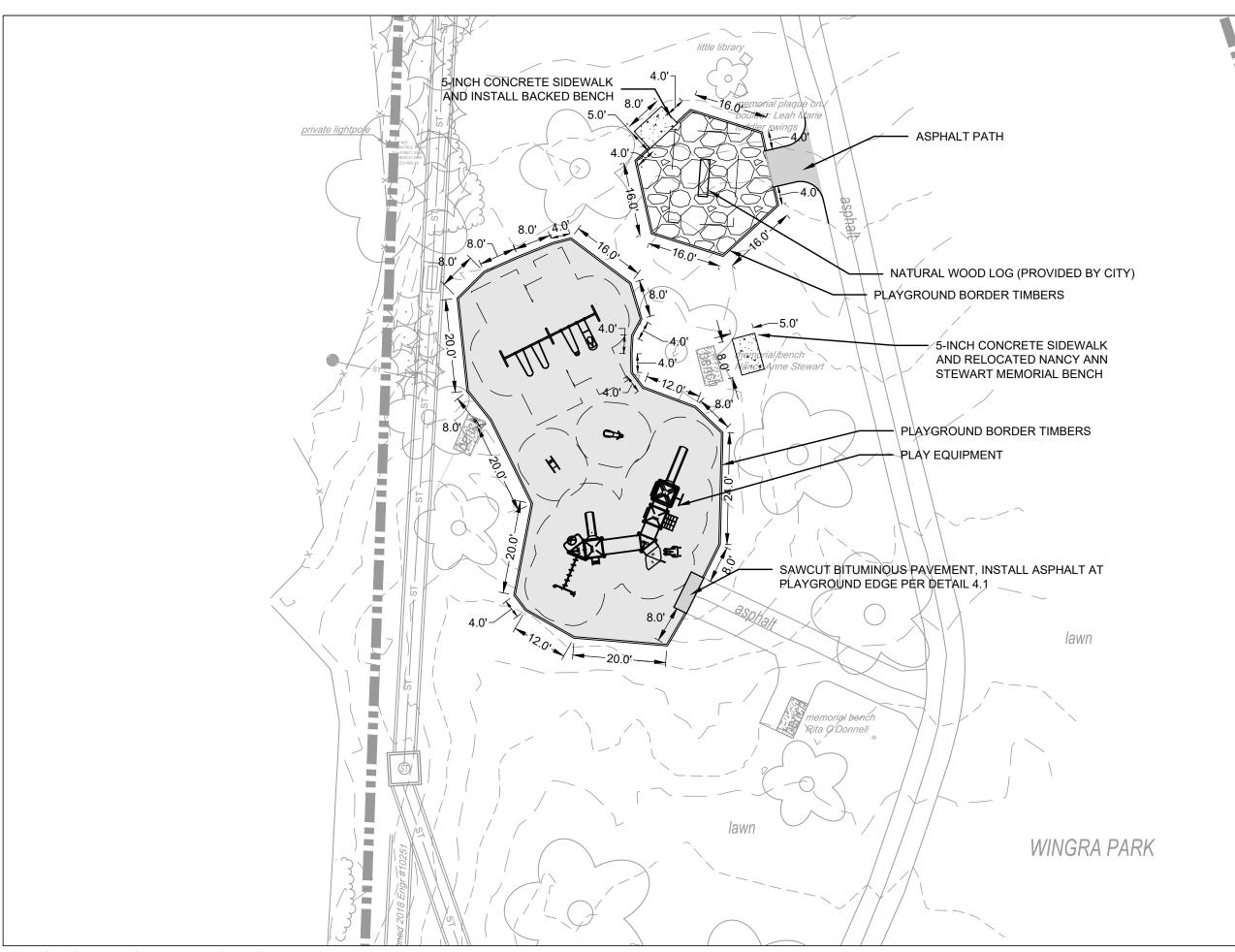
PUBLIC WORKS PROJECT #:

8849

PROJECT LOCATION AND SITE ACCESS







City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



Graphical Scale
0 30

PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

WINGRA PARK 824 KNICKERBOCKER ST. MADISON, WI 53711

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

DATE
2020-04-09

PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

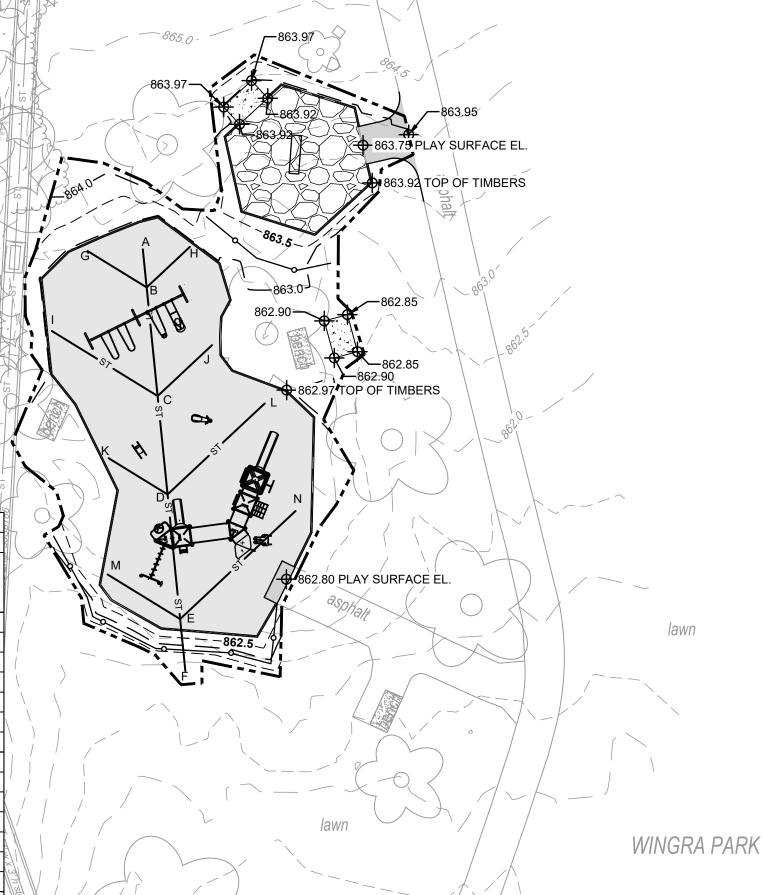
SITE PLAN

CHEET NILINA

NOTES 1.) ALL DISTURBED AREAS SHALL RECEIVE CLASS I, URBAN TYPE A EROSION CONTROL MATTING. Point Invert (ft) Distance from top of timbers 862.97 (INCHES) A 861.22 -21.00 B 861.18 -21.48 C 861.07 -22.84

Point	Invert (ft)	timbers 862.97	<u> </u>
Point	invert (it)		7
		(INCHES)	
Α	861.22	-21.00	
В	861.18	-21.48	RIM:
С	861.07	-22.84	
D	860.96	-24.08	×/ 1
E	860.83	-25.64	
F	860.78	-26.29	
G	860.70	-27.24	+ aprx 1
Н	861.22	-21.04	
I	861.22	-21.04	
J	861.22	-21.04	
K	861.22	-21.04	
L	861.22	-21.04	
М	861.22	-21.04	×/ /
N	861.22	-21.04	
		\	
	Drain Tile	Lengths & Slopes	
1 -			1

	•	•		\ / , \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
	Drain Tile Lengths & Slopes						
fr	om interse						
From	То	Length (ft)	Slope (%)	Pipe type			
Α	В	8	-0.50%	UNDERDRAIN			
В	С	22.7	-0.50%	UNDERDRAIN			
С	D	20.59	-0.50%	UNDERDRAIN			
D	E	26	-0.50%	UNDERDRAIN			
Е	F	10.8	-0.50%	UNDERDRAIN			
G	В	14.4	-3.33%	UNDERDRAIN			
Ī	С	25.8	-1.86%	UNDERDRAIN			
K	D	14.42	-1.76%	UNDERDRAIN			
М	E	17.7	-2.16%	UNDERDRAIN			
Н	В	12.35	-0.30%	UNDERDRAIN			
J	С	15.5	-0.97%	UNDERDRAIN			
L	D	27.7	-0.91%	UNDERDRAIN			
N	E	32.9	-1.16%	UNDERDRAIN			
E	F	10.8	-0.25%	UNDERDRAIN			
	Total	259.66					



City of Madison Department of Public Works PARKS DIVISION

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703

play MADISON PARKS

Graphical Scale
0 20

PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

WINGRA PARK 824 KNICKERBOCKER ST. MADISON, WI 53711

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ITEM DATE
ADVERTISED TO BID 2020-04-09

PUBLIC WORKS PROJECT #:

8849

SHEET TITLE: GRADING AND
EROSION CONTROL
PLAN

SHEET NUMBE

Sort	Grp	Material	ltem	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac- tored volume (cu ft)	Unfac- tored volume (cu yd)	Expan- sion Factor (%)	Factored (Uncom- pacted) Volume (cu yd)
1.1	Grass to Grass	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	852.19	0.50	426.10	15.8	0%	15.8
1, 1	Grass to		Cut subsoil to proposed	II/a	II/a	032.19	0.30	420.10	13.0	0 70	13.0
1.2	Grass	Subsoil Excavate	subgrade	Ex-6in	Pro-6in	852.19	varies	43.75	1.6	0%	1.6
	Grass to		Fill subsoil to proposed								
1.3		Subsoil Place	subgrade	Ex-6in	Pro-6in	852.19	varies	-220.45	-8.2	0%	-8.2
1.4	Grass to Grass	Topsoil Place	Place 6" topsoil	ln/a	n/a	 852.19	-0.50	-426.10	-15.8	0%	-15.8
1	Grass to 5-	Topsoil 1 lace	Tiace of topson	II/a	II/a	032.13	-0.50	720.10	10.0	0 70	-10.0
2.1		Topsoil Excavate	Strip 6" topsoil	n/a	n/a	80.00	0.50	40.00	1.5	0%	1.5
	Grass to 5-		Cut subsoil to proposed								
2.2			subgrade	Ex-6in	Pro-8inch	80.00	varies	21.13	0.8	0%	0.8
2.2	Grass to 5- inch Concrete		Fill subsoil to proposed	Ev Cin	Pro-8inch	00.00	Larios	0.26	0.0	0%	0.0
2.3	Grass to 5-	Subsoil Place	subgrade	Ex-6in	Pro-oinch	00.00	varies	-0.36	0.0	0%	0.0
2.4		Concrete Place	Place 5"of concrete	n/a	n/a	80.00	-0.41	-32.80	-1.2	0%	-1.2
	Grass to 5-										
2.5		Gravel Place (Concrete)	Place 3" of gravel	n/a	n/a	80.00	-0.25	-20.00	-0.7	0%	-0.7
0.4	Grass to play	T 115 (01: 0111	,	,	44400	0.50	007.40		00/	7 7
3.1	surface Grass to play		Strip 6" topsoil Cut subsoil to proposed	n/a	n/a Pro-14	414.38	0.50	207.19	7.7	0%	7.7
3.2			subgrade	Ex-6in		414.38	varies	87.25	3.2	0%	3.2
0.2	Grass to play		Fill subsoil to proposed	LX OIII	Pro-14	111.00	Variou	07.20	0.2	1070	0.2
3.3	surface	1	subgrade	Ex-6in	inch	414.38	varies	-48.94	-1.8	0%	-1.8
_		Play Surface Place (Wood									
3.4		Mulch)	Place 14" of wood mulch	n/a	n/a	414.38	-1.17	-483.44	-17.9	0%	-17.9
	Grass to play surface (pea										
4.1	gravel)	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	445.94	0.50	222.97	8.3	0%	8.3
	Grass to play			-							
	surface (pea		Cut subsoil to proposed		Pro-14						
4.2		Subsoil Excavate	subgrade	Ex-6in	inch	445.94	varies	291.47	10.8	0%	10.8
	Grass to play surface (pea		Fill subsoil to proposed		Pro-14						
4.3			subgrade	Ex-6in	inch	445.94	varies	0.00	0.0	0%	0.0
	Grass to play							10.00	10.0	1070	0.0
	surface (pea										
4.4		Pea gravel place	Place 14" of pea gravel	n/a	n/a	445.94	-1.17	-520.26	-19.3	0%	-19.3
5.1	Grass to	Topsoil Execute	Strip 6" topsoil	n/a	n/a	84.72	0.50	42.36	1.6	0%	1.6
5.1	Asphalt Grass to		Strip 6" topsoil Cut subsoil to proposed	n/a	n/a	04.72	0.50	42.30	1.0	0 70	1.0
5.2			subgrade	Ex-6in	Pro-12in	84.72	varies	41.26	1.5	0%	1.5
	Grass to		Fill subsoil to proposed								
5.3		Subsoil Place	subgrade	Ex-6in	Pro-12in	84.72	varies	0.00	0.0	0%	0.0
_ .	Grass to	Omanal Black (see	Diagonal of the state of			04.70	0.75	00.54		00/	
5.4	Asphalt Grass to	Gravel Place (pavement)	Place 9" of gravel	n/a	n/a	84.72	-0.75	-63.54	-2.4	0%	-2.4
5.5		Asphalt Place	Place 3in asphalt	n/a	n/a	84.72	-0.25	-21.18	-0.8	0%	-0.8
3.3	Grass to					<u> </u>			1.0		
6.1	Timbers		Strip 6" topsoil	n/a	n/a	39.24	0.50	19.62	0.7	0%	0.7
	Grass to		Cut subsoil to proposed								
6.2			subgrade	Ex-6in	Pro-12in	39.24	varies	10.18	0.4	0%	0.4
6.3	Grass to Timbers		Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	39.24	varies	-10.54	-0.4	0%	-0.4
0.3	THIDEIS		Place playground border	L^-0111	1 10-12111	JJJ. Z4	varies	-10.54	J-U. 4	0 /0	
ı	Grass to		timbers (placeholder volume								
6.4			to balance volume comps)	n/a	na	39.24	-1.00	-39.24	-1.5	0%	-1.5

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

WINGRA PARK 824 KNICKERBOCKER ST. MADISON, WI 53711

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
ADVERTISED TO BID	2020-04-09

PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

DESIGN COMPUTATIONS

SHEET NUME

ort	Grp	Material	ltem	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac- tored volume (cu ft)	Unfac- tored volume (cu yd)	Expan- sion Factor (%)	Factore (Uncom pacted) Volume (cu yd)
	Play surface		Remove existing play surface, estimated depth 17								
7.1	to Grass	Play Surface Excavate	in	n/a	n/a	1621.02	1.42	2296.45	85.1	0%	85.1
7.2	Play surface to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	1621.02	varies	0.00	0.0	0%	0.0
1.2	Play surface	Subsoil Excavate	Fill subsoil to proposed	EX-1/111	P10-6111	1621.02	varies	0.00	0.0	0%	0.0
7.3		Subsoil Place	subgrade	Ex-17in	Pro-6in	1621.02	varies	-1390.10	-51.5	0%	-51.5
7.4	Play surface to Grass	Topsoil Place	Place 6" of topsoil	n/a	n/a	1621.02	-0.50	-810.51	-30.0	0%	-30.0
	Play surface		Remove existing play								
8.1	to play surface	Play Surface Excavate	surface, estimated depth 17in	n/a	n/a	2632.33	1.42	3729.13	138.1	0%	138.1
0.1	Play surface	Thay Sunded Executate	17.11	11/4	100	2502.50	2	0720.10	100.1	0,0	100.1
8.2	to play surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	2632.33	varies	88.34	3.3	0%	3.3
0.2	Play surface	Subsoil Excavate	subgrade	LX-17111	F10-12III	2032.33	varies	00.34	3.3	0 70	3.3
	to play		Fill subsoil to proposed		D 40:					201	05.4
8.3	surface Play surface	Subsoil Place	subgrade	Ex-17in	Pro-12in	2632.33	varies	-686.89	-25.4	0%	-25.4
8.4	to play surface	Play Surface Place (Wood Mulch)	Place 14in wood mulch play surface	n/a	n/a	2632.33	-1.17	-3079.83	-114.1	0%	-114.1
	Play surface to play		Remove existing play								
9.1	surface (pea	Play Surface Excavate	surface, estimated depth	2/2	2/0	179.00	1.42	253.58	9.4	0%	9.4
9.1	gravel) Play surface	Play Surface Excavate	17in	n/a	n/a	179.00	1.42	255.56	9.4	0%	9.4
	to play		0.1 - 1								
9.2	surface (pea gravel)	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-14in	179.00	varies	0.00	0.0	0%	0.0
	Play surface	Suppose Executate					14,1100	0.00	10.0	070	
	to play surface (pea		Fill subsoil to proposed								
9.3		Subsoil Place	subgrade	Ex-17in	Pro-14in	179.00	varies	-154.94	-5.7	0%	-5.7
	Play surface										
	to play surface (pea										
9.4	gravel)	Pea gravel place	Place 14" of pea gravel	n/a	n/a	179.00	-1.17	-208.83	-7.7	0%	-7.7
	Play surface		Remove existing play surface, estimated depth								
10.1		Play Surface Excavate	17in	n/a	n/a	64.52	1.42	91.40	3.4	0%	3.4
10.2	Play surface to timbers	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	64.52	varies	3.14	0.1	0%	0.1
10.2	Play surface	Subsail Dlass	Fill subsoil to proposed	Ev. 17in	Pro-12in	64.50	verios	20.02	1.0	00/	1.0
10.3	to timbers	Subsoil Place	subgrade Place playground border	Ex-17in	P10-12III	64.52	varies	-28.03	-1.0	0%	-1.0
10.4		Border Timbers Place (placeholder volume)	timbers (placeholder volume to balance volume comps)	n/a	n/a	64.52	-1.00	-64.52	-2.4	0%	-2.4
11.1		Pavement Excavate	Strip 1' of Asphalt and Gravel	n/a	n/a	30.98	1.00	30.98	1.1	0%	1.1
44.0	Asphalt to	Cuba sil Eva sunta	Cut subsoil to proposed	F., 4!	D== 41	20.00		0.00	0.0	00/	0.0
11.2	Asphalt Asphalt to	Subsoil Excavate	subgrade Fill subsoil to proposed	Ex-1'	Pro-1'	30.98	varies	0.80	0.0	0%	0.0
11.3	Asphalt	Subsoil Place	subgrade	Ex-1'	Pro-1'	30.98	varies	-1.17	0.0	0%	0.0
11.4	Asphalt to Asphalt	Gravel Place (pavement)	Place 9" of gravel	n/a	n/a	30.98	-0.75	-23.24	-0.9	0%	-0.9
	Asphalt to	, ,	•	-/-		20.00				00/	0.0
11.5	Asphalt Asphalt to	Asphalt Place	Place 3" of asphalt	n/a	n/a	30.98	-0.25	-7.75	-0.3	0%	-0.3
12.1		Pavement Excavate	Strip 1' of Asphalt and Gravel	n/a	n/a	111.57	1.00	111.57	4.1	0%	4.1
12.2	Asphalt to Place Surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-1'	Pro- 12inch	111.57	varies	31.38	1.2	0%	1.2
	Asphalt to		Fill subsoil to proposed		Pro-	444.5-				00/	
12.3	Place Surface Asphalt to		subgrade Place 14in wood mulch play	Ex-1'	12inch	111.57	varies	-0.10	0.0	0%	0.0
12.4	Place Surface	Mulch)	surface	n/a	n/a	111.57	-1.17	-130.54	-4.8	0%	-4.8
13.1	5" Concrete to Grass	Concrete Excavate	Remove 5" of concrete and 3" of gravel	n/a	n/a	62.37	0.66	41.16	1.5	0%	1.5
13.2	5" Concrete to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex- 8in	Pro-6in	62.37	varies	0.00	0.0	0%	0.0
	5" Concrete to	Cappon Excavate	Fill subsoil to proposed		. 10 0111		- Larico				
13.3		Subsoil Place	subgrade	Ex- 8in	Pro-6in	62.37	varies	-16.07	-0.6	0%	-0.6
13.4	5" Concrete to Grass	Topsoil Place	Place 8" of concrete	n/a	n/a	62.37	-0.50	-31.19	-1.2	0%	-1.2
			Increase play surface by 1/2								
		Play Surface Place (Wood	of asphalt ramp gravel base volume = 1/2 x (2.25 ft x 9 ft								
14	Adjust	Mulch)	,	n/a	n/a	31	-0.29	-6	-0.3	0%	_

Row Labels	Sum of Factored (Uncompacted) Volume (cu yd)
Asphalt Place	-1.1
Subsoil Excavate	22.9
Subsoil Place	-94.7
Topsoil Excavate	35.5
Topsoil Place	-47.0
Concrete Place	-1.2
Pavement Excavate	5.3
Gravel Place (Concrete)	-0.7
Play Surface Place (Wood	
Mulch)	-136.8
Gravel Place (pavement)	-3.2
Border Timbers Place	
(placeholder volume)	-3.8
Play Surface Excavate	150.9
Concrete Excavate	1.5
Play Surface Excavate	85.1
Pea gravel place	-27.0
Grand Total	-14.4

Reorganized into bid table items

Bid Item	Quantity	Units	Relation to Table Above
			= Subsoil Excavate +
			Topsoil Excavate + Pavement
			Excavate + Concrete
20101 Excavation Cut	65	CY	Excavate
20103 Excavation Cut -			
Pea Gravel	151	CY	= Play Surface Excavate
			= Subsoil Excavate +
20202 Fill - Borrow	72	CY	Subsoil Place
20221 Topsoil	281	SY	= (Topsoil Place)/167
40102 Crushed Aggregate			
Base Course Gradation			= ((Gravel Place) pavement)
No. 2	6	tons	* -2 ton/cubic yard
40202 HMA Pavement 4			= Asphalt Place * -2.16
LT 58-28 S	2.3	tons	ton/cubic yard
90003 Playground			
Surfacing - Wood Fiber			= Play Surface Place (Wood
Mulch	164.2	CY	Mulch * -1.2)
90004 Playground			
Surfacing - Pea Gravel	27	CY	= Pea gravel place

City of Madison Department of Public Works PARKS DIVISION

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

WINGRA PARK 824 KNICKERBOCKER ST. MADISON, WI 53711

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ITEM	DATE
ADVERTISED TO BID	2020-04-09
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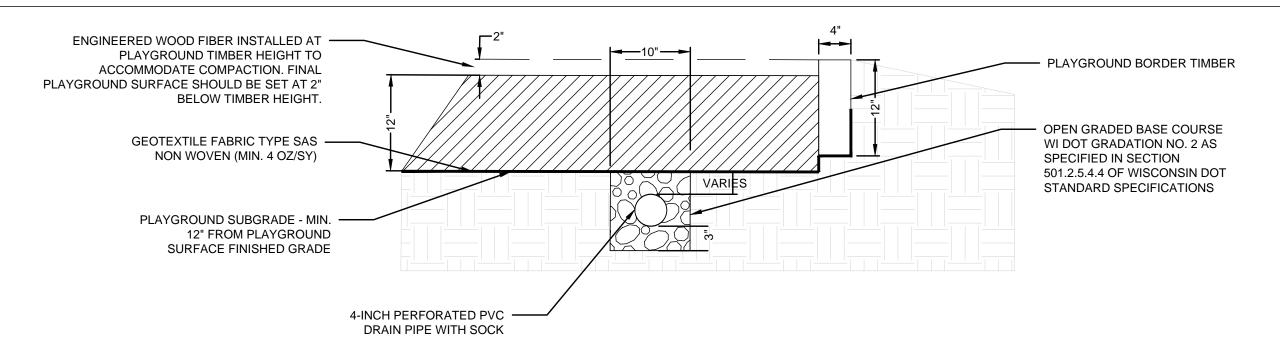
PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

DESIGN COMPUTATIONS

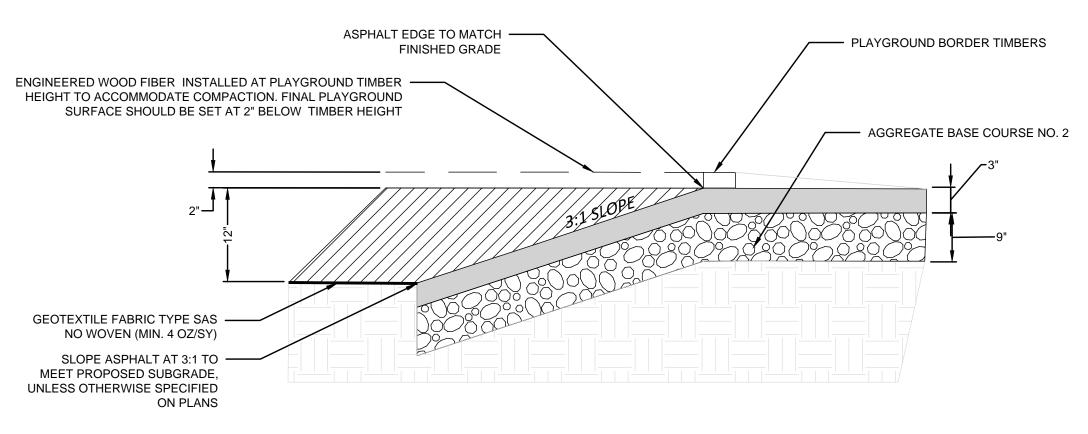
SHEET NUMBE



1 4.1

PLAYGROUND SURFACING WITH UNDERDRAIN

NOT TO SCALE



2 4.1

ASPHALT AT PLAYGROUND EDGE

NOT TO SCALE

City of Madison Department of Public Works PARKS DIVISION

City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

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ADVERTISED TO BID 2020-04-09

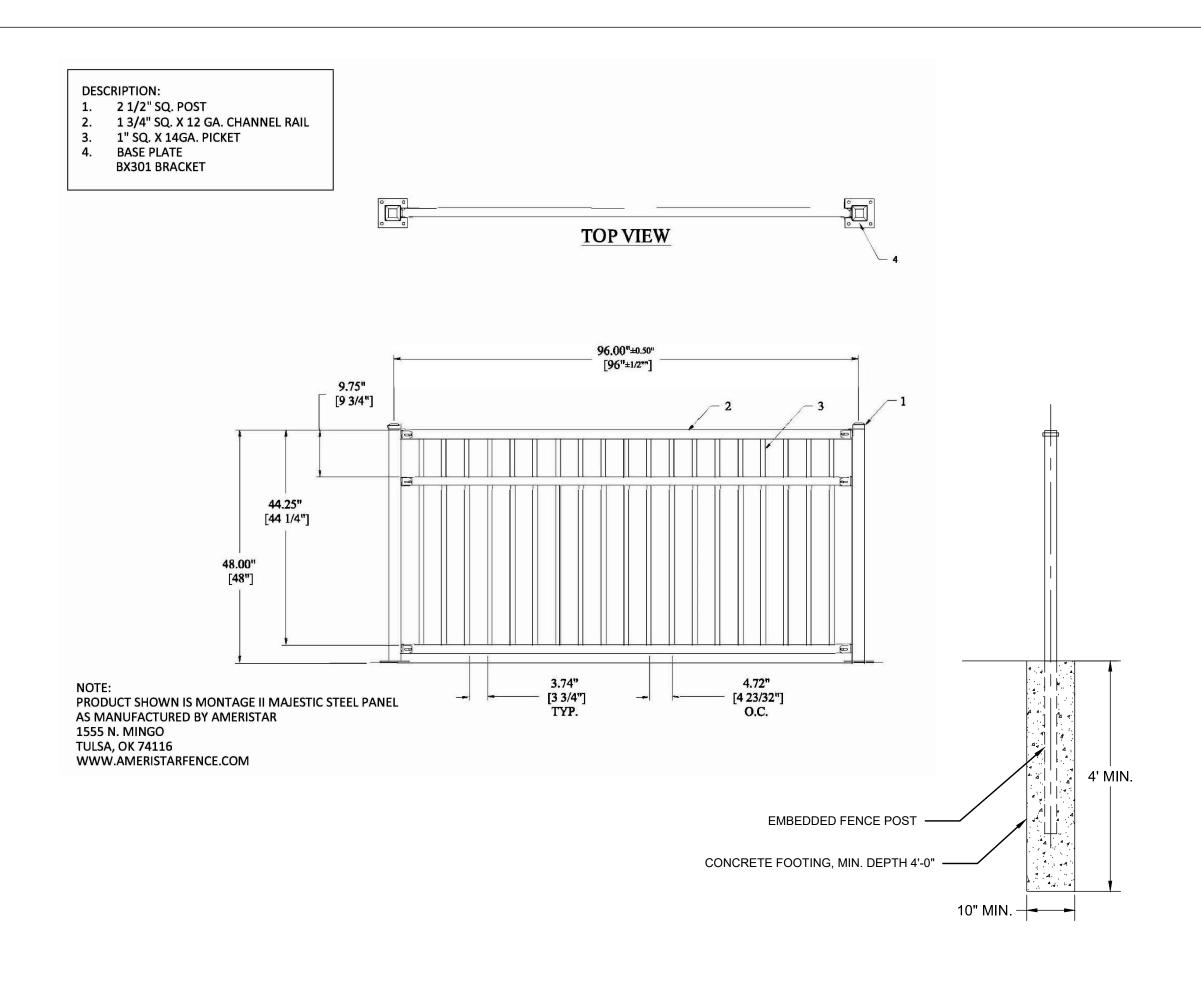
PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

DETAILS -PLAYGROUND & PAVEMENT EDGE

SHEET NUMBER:



City-County Building, Suite 104 210 Martin Luther King, Jr. Blvd. Madison, WI 53703



PROJECT:

2020 PLAYGROUND IMPROVEMENTS -GROUP 1

PROJECT ADDRESS:

HILLINGTON GREEN 435 HILLINGTON WAY MADISON, WI 53726

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ITEM	DATE
ADVERTISED TO BID	2020-04-09

PUBLIC WORKS PROJECT #:

8849

SHEET TITLE:

DETAILS -ORNAMENTAL METAL FENCING

SHEET NUMBER: