

# BID PACKAGE 2: CENTRAL ELEMENTARY PLAYGROUND RELOCATION AND EARLY SITE PACKAGE

## PORTAGE PUBLIC SCHOOLS

### Portage, Michigan

## CONSTRUCTION DOCUMENTS

#### DESIGN TEAM

##### ARCHITECT/ENGINEER

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Architecture · Engineering · Interiors

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##### STRUCTURAL ENGINEER

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Tomasetti**

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CHICAGO, ILLINOIS 60611-7622  
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FAX: 312.596.2001

##### CIVIL CONSULTANT

**HS**  
hurley & stewart

2800 SOUTH 11TH STREET  
KALAMAZOO, MICHIGAN 49009  
PHONE: 269.552.4960

##### FOOD SERVICE CONSULTANT

**JRA**  
Food Service  
Consultants, LLC

401 HALL STREET SW #234  
GRAND RAPIDS, MICHIGAN 49503  
PHONE: 616.454.4433

##### DESIGN PARTNER

**Fielding  
International**

460 HILTON ROAD  
FERNDALE, MICHIGAN 48220  
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##### CONSTRUCTION MANAGER

**Owen  
Ames  
Kimball**

2700 STADIUM DR, SUITE 2  
KALAMAZOO, MICHIGAN 49008  
PHONE: 269.276.9700

##### SITE ADDRESS

PORTAGE PUBLIC SCHOOLS  
CENTRAL ELEMENTARY SCHOOL  
8422 SOUTH WESTNEDGE AVENUE  
PORTAGE, MICHIGAN 49002

#### REFERENCED CODES

BUILDING: 2015 MICHIGAN BUILDING CODE AND 2012 NFPA 101 LIFE SAFETY CODE  
ENERGY: 2015 MICHIGAN ENERGY CODE  
PLUMBING: 2018 MICHIGAN PLUMBING CODE  
MECHANICAL: 2015 MICHIGAN MECHANICAL CODE  
FUEL GAS: (IFGC) 2015 INTERNATIONAL FUEL GAS CODE  
ELECTRICAL: 2017 NATIONAL ELECTRICAL CODE WITH MICHIGAN AMENDMENTS  
BARRIER-FREE: 2015 MICHIGAN BUILDING CODE AND 2009 ICC & C A117.1  
USE GROUP: E  
CONSTRUCTION TYPE: IIB  
AUTOMATIC SPRINKLERS: FULLY SPRINKLED

#### PROJECT AREA

TOTAL FINISHED PROJECT: 80,697 SQ. FT.

#### DRAWING INDEX

GENERAL  
G 001 COVER SHEET

TOPOGRAPHIC SURVEY  
TS 001 TOPOGRAPHIC SURVEY SOUTH  
TS 002 TOPOGRAPHIC SURVEY NORTH

CIVIL DEMOLITION  
CD 100 SITE DEMOLITION - NORTH  
CD 101 SITE DEMOLITION - SOUTH

CIVIL NEW CONSTRUCTION  
C 200 SITE LAYOUT PLAN - NORTH  
C 201 SITE LAYOUT PLAN - SOUTH  
C 300 SITE GRADING PLAN - NORTH  
C 301 SITE GRADING PLAN - SOUTH  
C 302 SITE SESC NOTES AND SCHEDULE  
C 303 TEMP. PLAYGROUND RELOCATION & DRIVE ENTRANCE GRADING PLAN-NORTH  
C 304 TEMP. PLAYGROUND RELOCATION & DRIVE ENTRANCE GRADING PLAN-SOUTH  
C 400 SITE UTILITY PLAN - NORTH  
C 401 SITE UTILITY PLAN - SOUTH  
C 402 WATER MAIN PROFILE  
C 500 SITE DETAILS  
C 501 UTILITY DETAILS  
C 502 SANITARY DETAILS  
C 503 WATER DETAILS

LANDSCAPE  
L 001 PLAY EQUIPMENT RELOCATION PLAN

ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2: CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION AND EARLY  
SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

DATE  
DECEMBER 16, 2022

SHEET TITLE  
COVER SHEET

SHEET NUMBER  
G 001  
21-237.11

ISSUED FOR \_\_\_\_\_ DATE \_\_\_\_\_

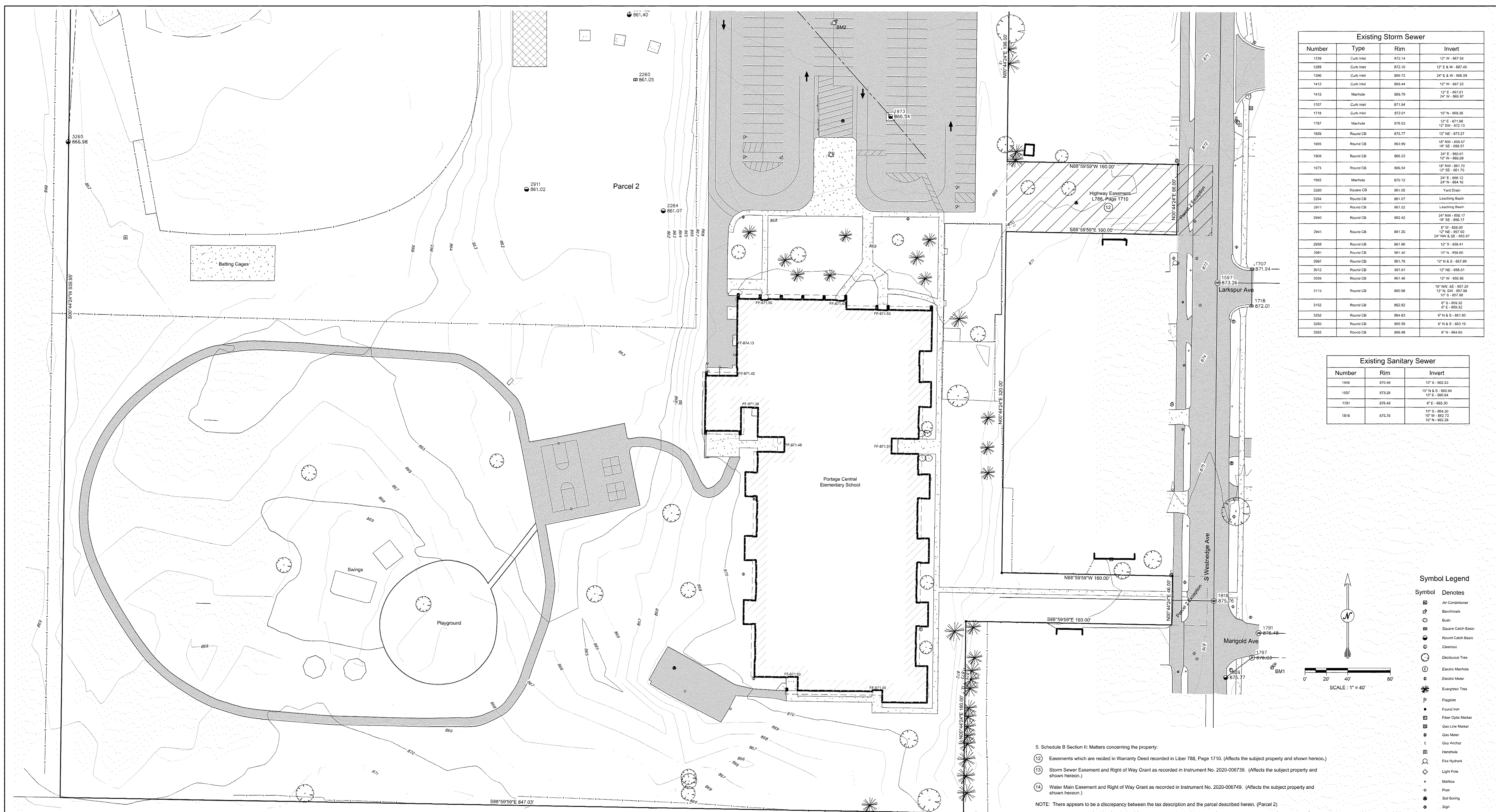
PROJECT TITLE  
**BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE.**

OWNER  
**PORTAGE PUBLIC SCHOOLS**

Portage, Michigan

SHEET TITLE  
**TOPOGRAPHIC SURVEY SOUTH**

DATE  
**DECEMBER 16, 2022**  
SHEET NUMBER  
**TS 001**  
21-237.11

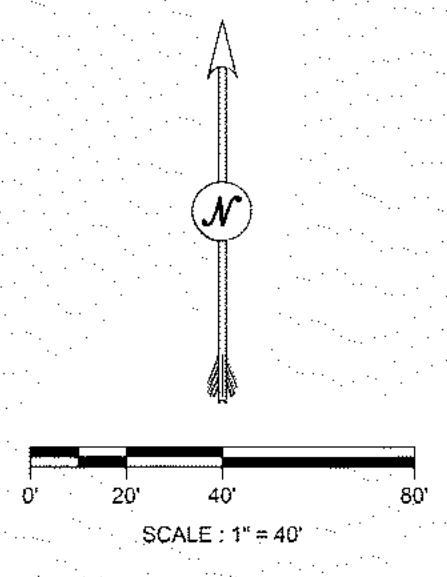


Existing Storm Sewer			
Number	Type	Rim	Invert
1236	Curb Inlet	872.14	12° W - 867.54
1239	Curb Inlet	872.10	12° E & W - 868.46
1360	Curb Inlet	869.72	24° E & W - 868.09
1412	Curb Inlet	869.44	12° W - 867.22
1415	Manhole	869.76	12° E - 867.61 24° W - 866.99
1707	Curb Inlet	871.94	
1719	Curb Inlet	872.01	12° N - 869.26
1737	Manhole	876.63	12° E - 871.94 12° SW - 872.13
1809	Round CB	875.77	12° NE - 873.27
1855	Round CB	862.99	18° NW - 858.07 18° SE - 858.57
1909	Round CB	866.23	24° E - 860.61 12° W - 860.01
1975	Round CB	866.54	18° NW - 861.20 12° SE - 861.75
1992	Manhole	870.12	24° E - 868.12 24° N - 864.94
2269	Square CB	861.65	Yard Drain
2264	Round CB	861.07	Leaching Basin
2911	Round CB	861.02	Leaching Basin
2940	Round CB	862.42	18° NW - 856.71 18° SE - 856.17
2941	Round CB	861.20	6° W - 858.09 12° NE - 857.50 24° NW & SE - 855.97
2948	Round CB	861.86	12° S - 858.41
2981	Round CB	861.45	12° N - 858.63
2997	Round CB	861.79	12° N & S - 857.99
3012	Round CB	861.61	12° NE - 858.51
3059	Round CB	861.40	12° W - 856.00
3113	Round CB	860.56	18° NW & SE - 857.20 12° N, SW - 857.48 12° S - 867.98
3152	Round CB	862.82	6° S - 859.32 6° E - 859.32
3262	Round CB	864.83	6° N & S - 861.80
3300	Round CB	865.55	6° N & S - 863.19
3385	Round CB	866.48	6° N - 864.65

Existing Sanitary Sewer		
Number	Rim	Invert
1440	876.48	10° S - 862.53
1507	873.28	12° N & S - 862.64 12° S - 860.64
1781	876.48	E - 865.30
1816	875.76	10° S - 864.30 10° W - 862.72 10° N - 862.28

**Symbol Legend**

Symbol	Denotes
⊠	Cornerstone
⊕	Electric
⊙	Manhole
⊚	Round Catch Basin
⊛	Square Catch Basin
⊜	Clearcut
⊝	Deciduous Tree
⊞	Electric Meter
⊟	Electric Meter
⊠	Evergreen Tree
⊡	Flagpole
⊢	Found Iron
⊣	Floor Cycle Marker
⊤	Gas Line Marker
⊥	Gas Meter
⊦	Gray Anchor
⊧	Handhole
⊨	Fire Hydrant
⊩	Light Pole
⊪	Mailbox
⊫	Post
⊬	Sign
⊭	Sanitary Manhole
⊮	Storm Manhole
⊯	Telephone Manhole
⊰	Telephone Manhole
⊱	Utility Pole
⊲	Water Box
⊳	Water Service



5. Schedule B Section II: Matters concerning the property:
- 12. Easements which are recited in Warranty Deed recorded in Liber 786, Page 1710. (Affects the subject property and shown hereon.)
  - 13. Storm Sewer Easement and Right of Way Grant as recorded in Instrument No. 2020-006739. (Affects the subject property and shown hereon.)
  - 14. Water Main Easement and Right of Way Grant as recorded in Instrument No. 2020-006749. (Affects the subject property and shown hereon.)
- NOTE: There appears to be a discrepancy between the tax description and the parcel described herein. (Parcel 2)

**GENERAL NOTES:**

- Utilities shown are approximate locations derived from actual measurements. They should not be interpreted to be exact locations nor should it be assumed that they are the only utilities in this area.
- Coordinates are Michigan State Plane South Coordinate System, elevations are NAVD83 (Geoid 18) both based on MDTOT CORS.
- BENCHMARKS**  
BM1: Mag nail in north side of power pole located at the southeast corner of Marigold Avenue and South Westhedge Avenue.  
ELEVATION: 877.82  
BM2: NE anchor bolt of light pole located 220' north and 450' west of the northeast school building corner.  
ELEVATION: 867.70

**4. LEGAL DESCRIPTION:** Per Transaction Title Agency File No. 396108GRS

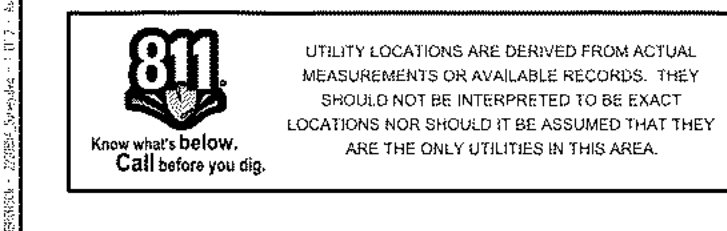
**Parcel 1:**  
A parcel of land located in the Northeast 1/4 of Section 21, Town 3 South, Range 11 West, City of Portage, Kalamazoo County, Michigan, more particularly described as follows: Beginning in the East line of Section 21, Town 3 South, Range 11 West, at a point 726 feet South of the Northeast corner of said Section and continuing thence South along the East line of said Section 874.5 feet; thence West parallel to the North line of said Section 490 feet; thence South parallel to the East line of said Section 108 feet; thence West parallel to the North line of said Section, 1010.5 feet to the Easement line of right of way of the New York Central (formerly Lakeshore and Michigan Southern) Railroad; thence Northwesterly along the Easement line of said railroad right of way, 918.07 feet to a point which is 807.8 feet South of the North line of said Section; thence East parallel to the North line of said Section, 530.93 feet to a point which is 516.06 feet West of the East line of said Section; thence North parallel to the East line of said Section, 181.8 feet to a point which is 726 feet South of the North line of said Section; thence East parallel to the North line of said Section 516.06 feet to the place of beginning, EXCEPT the East 33 feet thereof for public highway purposes, and EXCEPT commencing at the Northeast corner of Section 21, Town 3 South, Range 11 West, City of Portage, Kalamazoo County, Michigan, and running thence South 89° 50' 30" East, 162.72 feet, thence North 89° 50' 30" East, 55 minutes 30 seconds West, 883.57 feet, parallel to the North line of said Section 21 to the place of beginning of the land hereinafter described; thence South 79° 30' 00" East, 162.72 feet, parallel to the East line of said Section 21; thence North 89° 50' 30" East, 55 minutes 30 seconds West, 883.57 feet, parallel to the North line of said Section 21, to the place of beginning of the land hereinafter described; thence South 79° 30' 00" East, 162.72 feet, parallel to the East line of said Section 21; thence North 89° 50' 30" East, 55 minutes 30 seconds West, 883.57 feet, parallel to the North line of said Section 21 to the place of beginning.

**Parcel 2:**  
Beginning at a point in the East line of Section 21, Town 3 South, Range 11 West, City of Portage, Kalamazoo County, Michigan, 1000.5 feet South of the Northeast corner of said Section, thence West parallel to the North line of said Section 490 feet; thence South parallel to the East line of said Section 108 feet; thence West parallel to the North line of said Section 1010.5 feet; thence South parallel to the East line of said Section 530.93 feet to the East and West 1/4 line of said Section; thence East thereon 847.03 feet; thence North parallel to the East line of said Section 190 feet; thence East parallel to the East and West 1/4 line of said Section 228 feet to the East line of said Section; thence North thereon 46 feet; thence West parallel to the East-West 1/4 line of said Section 193 feet; thence North parallel to the East line of said Section 320 feet; thence East parallel to the East-West 1/4 line of said Section 193 feet to the East line of said Section; thence North 68 feet; thence West parallel to the East-West 1/4 line of said Section 193 feet; thence North parallel to the East line of said Section 198 feet; thence East parallel to the East-West 1/4 line of said Section 193 feet to the East line of said Section; thence North thereon 239.43 feet to the place of beginning.

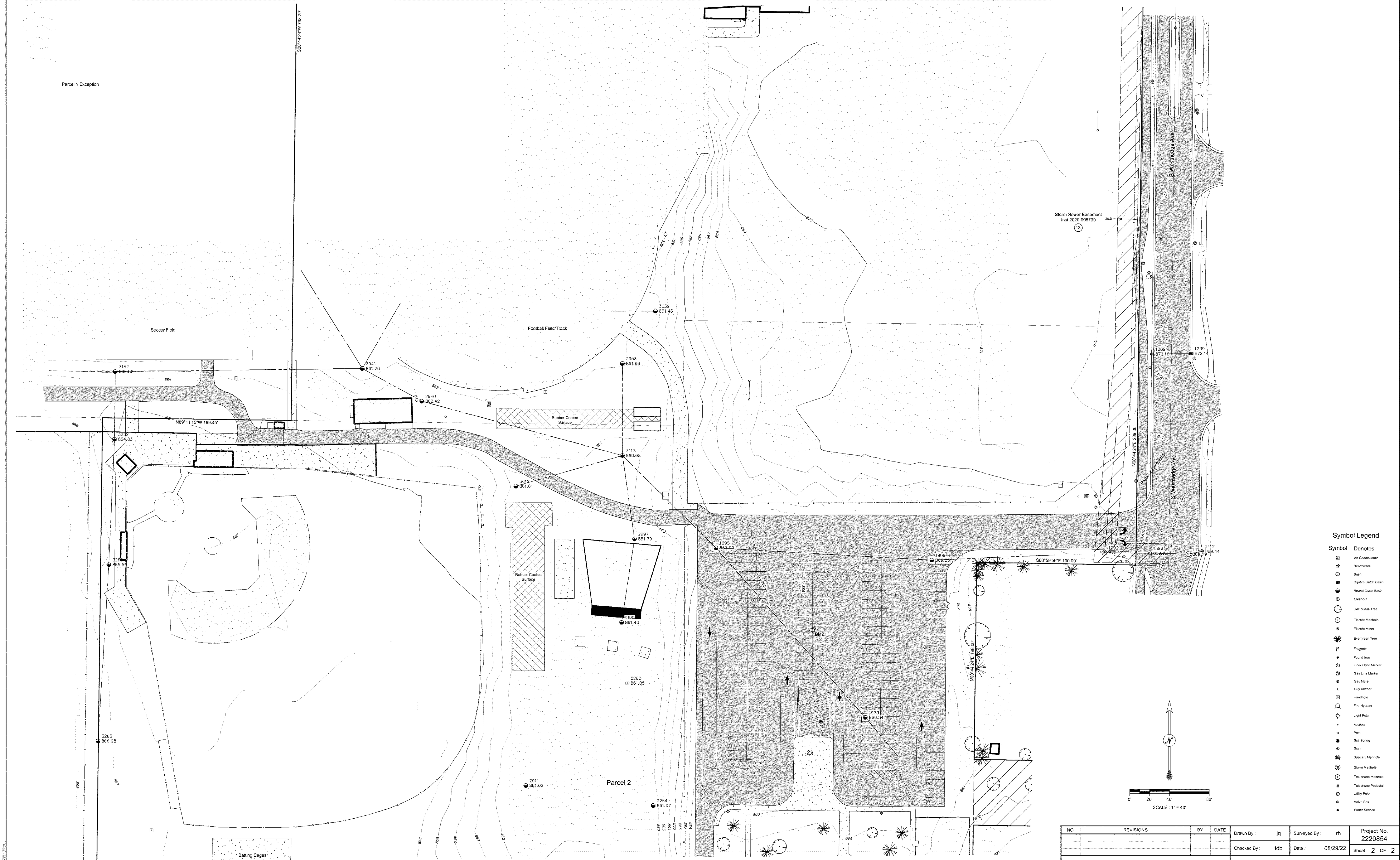
**EXCEPT**, the following described for highway purposes: Commencing at the East 1/4 post of Section 21, Town 3 South, Range 11 West, thence North along the East line of said Section 160 feet for the place of beginning of the land hereinafter described; thence continuing North along said East line 46 feet; thence West parallel to the East-West 1/4 line of said Section 33 feet; thence South parallel to the East line of said Section 46 feet; thence East parallel to the East-West 1/4 line of said Section 33 feet to the place of beginning.

**ALSO EXCEPT**, the following described for highway purposes: Commencing at the East 1/4 post of Section 21, Town 3 South, Range 11 West, thence North along the East line of said Section 548 feet for the place of beginning of the land hereinafter described; thence continuing North along said East line 98 feet; thence West parallel to the East-West 1/4 line of said Section 33 feet; thence South parallel to the East line of said Section 66 feet; thence East parallel to the East-West 1/4 line of said Section 33 feet to the place of beginning.

**ALSO EXCEPT**, the following described for highway purposes: Commencing at the East 1/4 post of Section 21, Town 3 South, Range 11 West, thence North along the East line of said Section 810 feet for the place of beginning of the land hereinafter described; thence continuing North along said East line 98 feet; thence West parallel to the East-West 1/4 line of said Section 33 feet; thence South parallel to the East line of said Section 66 feet; thence East parallel to the East-West 1/4 line of said Section 33 feet to the place of beginning.



NO.	REVISIONS	BY	DATE	Drawn By:	JR	Surveyed By:	rh	Project No.	2220854
				Checked By:	tob	Date:	08/29/22	Sheet	1 of 2
<b>Prein &amp; Newhof</b> Engineers • Surveyors • Environmental • Laboratory								DESIGN SURVEY FOR Portage Public School	
3355 Evergreen Drive NE Grand Rapids, MI 49526 www.preinnewhof.com				1 (616) 364-8491 1 (616) 364-6555 info@preinnewhof.com				8701 Mustang Drive Portage, MI 49602	



Symbol Legend

Symbol	Denotes
⊠	Air Conditioner
⊙	Benchmark
⊕	Bush
⊞	Square Catch Basin
⊟	Round Catch Basin
⊠	Ceiling
⊡	Deciduous Tree
⊢	Electric Meter
⊣	Electric Meter
⊤	Evergreen Tree
⊥	Flagpole
⊦	Found Iron
⊧	Fiber Optic Marker
⊨	Gas Line Marker
⊩	Gas Valve
⊪	Clay Anchor
⊫	Handhole
⊬	Fire Hydrant
⊭	Light Pole
⊮	Mailbox
⊯	Post
⊰	Soil Boring
⊱	Sign
⊲	Sanitary Manhole
⊳	Storm Manhole
⊴	Telephone Manhole
⊵	Telephone Pedestal
⊶	Utility Pole
⊷	Valve Box
⊸	Water Service

NO.	REVISIONS	BY	DATE

Drawn By: jrl    Surveyed By: rh    Project No. 2220854  
Checked By: tdb    Date: 08/29/22    Sheet 2 of 2

**Prein & Newhof**  
Engineers • Surveyors • Environmental • Laboratory

3355 Evergreen Drive NE  
Grand Rapids, MI 49502  
www.preinnewhof.com

1 (616) 364-8491  
F (616) 364-0555  
info@preinnewhof.com

DESIGN SURVEY  
FOR  
Portage Public School

8701 Mustang Drive  
Portage, MI 49002

**811**  
Know what's below  
Call before you dig

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.



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hurley & stewart, llc  
2800 s. 11th street  
kalamazoo, michigan 49009  
269.552.4960 fax 269.552.4961  
www.hurleystewart.com

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.  
FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

REMOVALS LEGEND

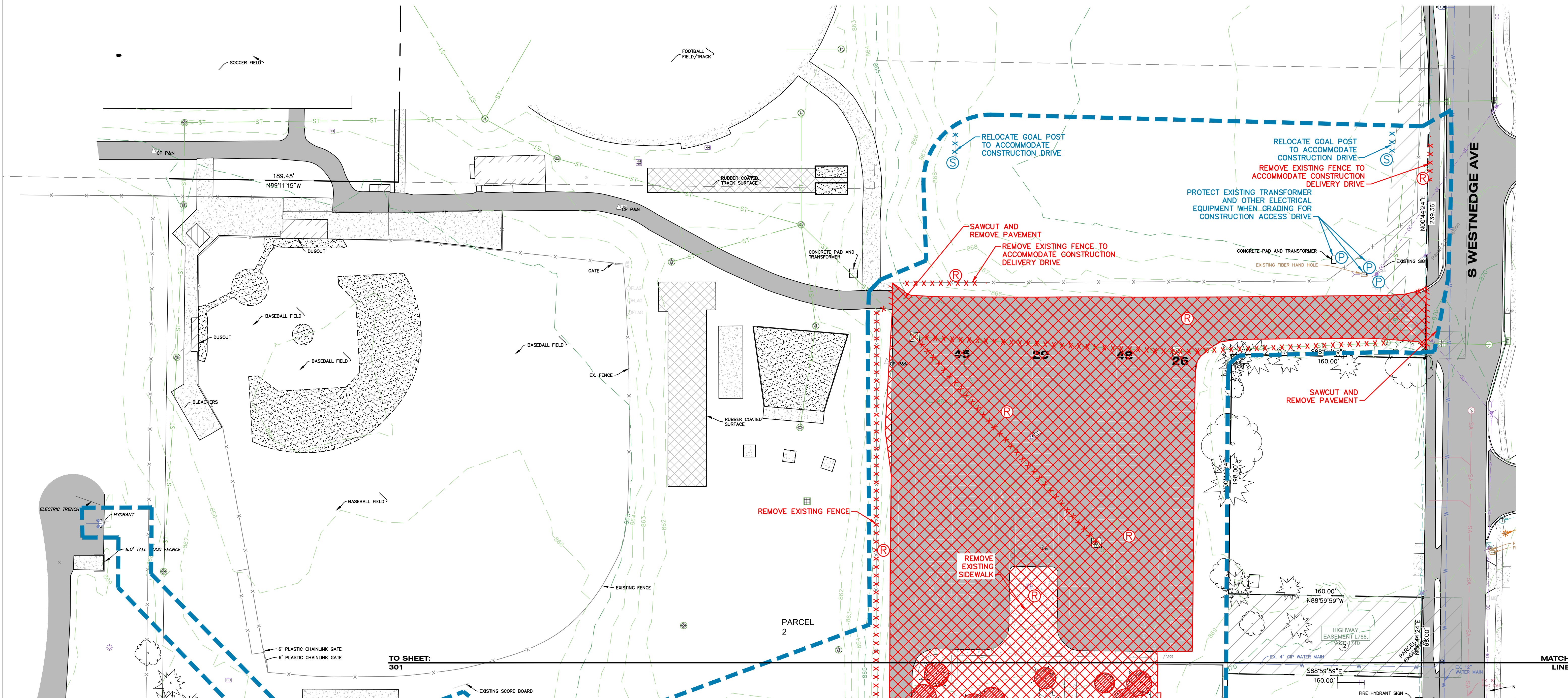
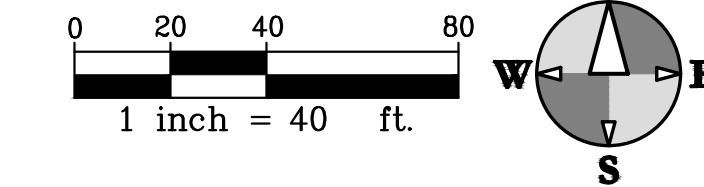
- CURB REMOVAL
- ////// SAWCUT
- XXXXXX PAVEMENT/SIDEWALK REMOVAL
- XXXXXX BUILDING DEMOLITION
- UTILITY LINE REMOVAL
- TREE REMOVAL
- REMOVE
- PROTECT
- SALVAGE
- LIMITS OF CONSTRUCTION

REMOVAL NOTES

- REVIEW ALL THE REMOVALS AND PROTECTION WITH OWNER PRIOR TO COMMENCING CONSTRUCTION. INSTALL TEMPORARY SNOW FENCE AROUND ALL TREES REQUIRING PROTECTION. SNOW FENCE SHALL BE PLACED AT EDGE OF DRIP LINE.
- SAWCUT ALL CURB, SIDEWALK, AND PAVEMENTS PRIOR TO REMOVAL. ADDITIONAL SAWCUT MAY BE NECESSARY PRIOR TO REPLACEMENT TO ENSURE CLEAN EDGE.
- ALL REMOVALS SHALL BE TAKEN OFF-SITE AND DISPOSED OF. NO STOCKPILE OR BURNING OF DEBRIS IS ALLOWED.
- COMPLY WITH ALL ASPECTS OF THE SOIL EROSION CONTROL PERMIT AS ISSUED BY CITY OF PORTAGE. ALL TEMPORARY CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION.
- ALL REMOVALS SHALL BE TO THE LIMITS INDICATED ABOVE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. UNAUTHORIZED REMOVALS AND SUBSEQUENT REPLACEMENT SHALL BE AT THE CONTRACTOR'S EXPENSE.
- REMOVE, STORE, AND RESET ANY EXISTING SIGNS AS DIRECTED BY THE ENGINEER/OWNER.
- REMOVE ALL TREES TO THE CLEARING LIMITS AS SHOWN. REMOVE ALL EXISTING TREES, STUMPS AND BRUSH FROM THE SITE AS NECESSARY TO CONSTRUCT THE IMPROVEMENTS.
- REVIEW CLEARING LIMITS WITH OWNER PRIOR TO COMMENCING WORK. PRESERVE TREES WHERE INDICATED.
- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
- FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL 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.

BENCHMARKS

BM # 01 ELEVATION = 877.82  
NAIL IN NORTH SIDE OF POWER POLE  
LOCATED AT SOUTHEAST CORNER OF  
MARIGOLD AVE AND SOUTH WESTNEDGE AVE  
BM # 02 ELEVATION = 867.7  
NE ANCHOR BOLT OF LIGHT POLE LOCATED  
±200' NORTH AND ±90' WEST OF THE  
NE SCHOOL BUILDING CORNER



ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
SITE DEMOLITION - NORTH  
SHEET NUMBER  
CD 100  
DATE  
DECEMBER 21, 2022  
21-237.11



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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

**REMOVALS LEGEND**

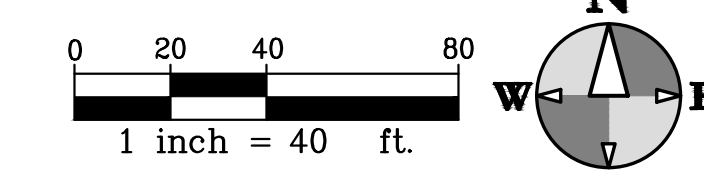
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- ////// SAWCUT
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- ▩ BUILDING DEMOLITION
- ▨ SALVAGE PLAYGROUND EQUIPMENT AREA
- - - - - UTILITY LINE REMOVAL
- TREE REMOVAL
- Ⓡ REMOVE
- Ⓟ PROTECT
- Ⓢ SALVAGE
- LIMITS OF CONSTRUCTION

**REMOVAL NOTES (TO APPLY TO ENTIRE PROJECT)**

1. REVIEW ALL THE REMOVALS AND PROTECTION WITH OWNER PRIOR TO COMMENCING CONSTRUCTION.
2. SAWCUT ALL CURB, SIDEWALK, AND PAVEMENTS PRIOR TO REMOVAL. ADDITIONAL SAWCUT MAY BE NECESSARY PRIOR TO REPLACEMENT TO ENSURE CLEAN EDGE.
3. ALL REMOVALS SHALL BE TAKEN OFF-SITE AND DISPOSED OF. NO STOCKPILE OR BURNING OF DEBRIS IS ALLOWED.
4. COMPLY WITH ALL ASPECTS OF THE SOIL EROSION CONTROL PERMIT AS ISSUED BY THE CITY OF KALAMAZOO. ALL TEMPORARY CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION.
5. ALL REMOVALS SHALL BE TO THE LIMITS INDICATED ABOVE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. UNAUTHORIZED REMOVALS AND SUBSEQUENT REPLACEMENT SHALL BE AT THE CONTRACTOR'S EXPENSE.
6. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
7. FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL 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.

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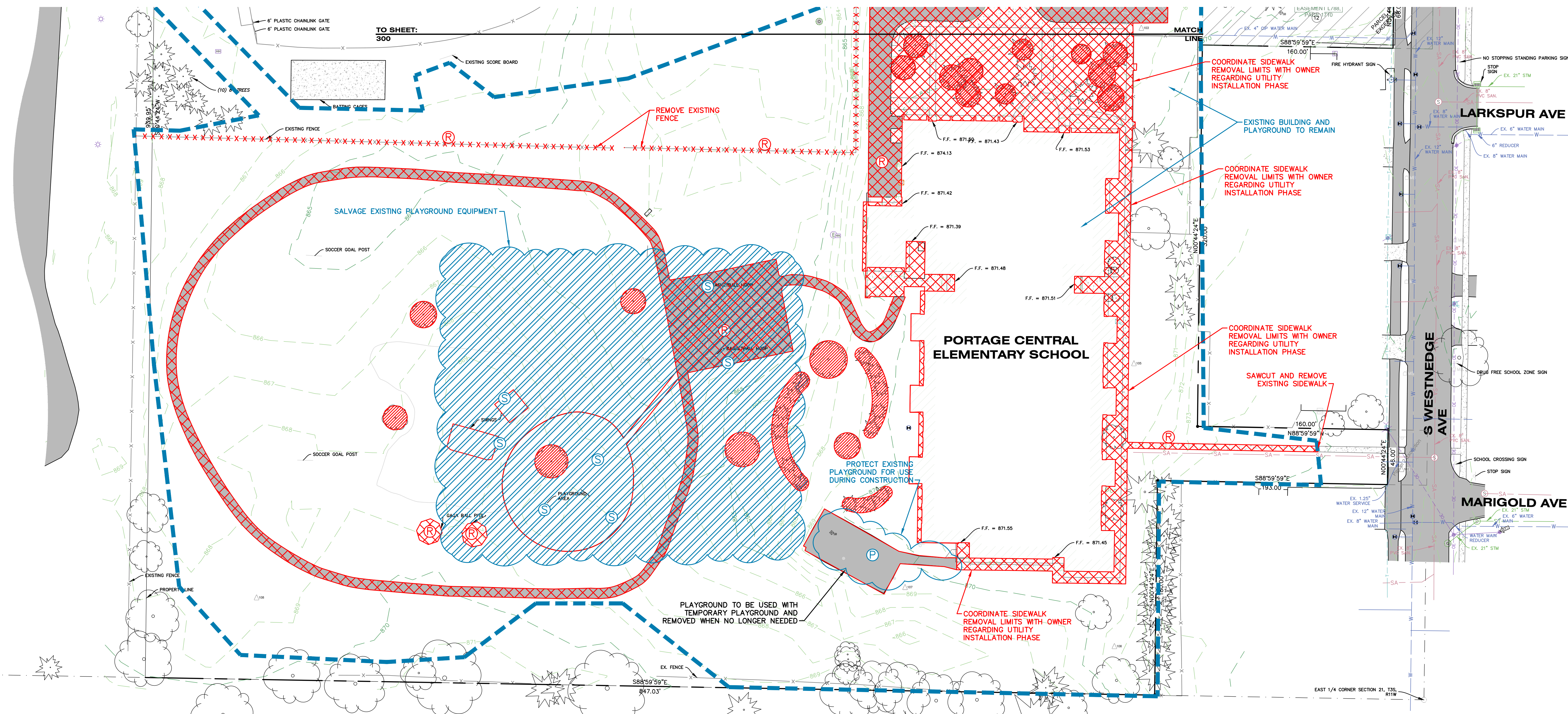


ISSUED FOR \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
SITE DEMOLITION - SOUTH  
DATE  
DECEMBER 21, 2022  
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CD 101  
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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

NOTES

1. PROVIDE CURB CUTS/RAMPS AT ALL BARRIER FREE ACCESS POINTS.
2. PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM TO THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND MICHIGAN BARRIER FREE CODE.
3. SEE LANDSCAPE PLANS FOR HARDSCAPE, DETAILED GRADING IN LANDSCAPED AREAS AND SIGNAGE.
4. SEE ARCHITECTURAL PLANS FOR MORE DETAILS ON TRUCK DOCK WALLS, STAIRS, AND RAMPS.
5. MATCH EXISTING CURB & GUTTER SECTIONS WHEN CONNECTING TO THEM. CONDITIONS VARY THROUGHOUT PROJECT.
6. ALL SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
7. PLACE FIRE HYDRANT AND 'NO PARKING THIS SIDE OF STREET' SIGNS AT EACH HYDRANT LOCATION AND A 'NO PARKING THIS SIDE OF STREET' SIGN MIDWAY BETWEEN HYDRANTS.
8. LIGHT STANDARDS AND UTILITY POLES TO BE LOCATED A MINIMUM OF FIVE FEET FROM BACK-OF-CURB.
9. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
10. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT THE TIME OF CONSTRUCTION.
11. ALL EXTERIOR CONCRETE SHALL BE MDOT GRADE P1 (3500PSI), AIR ENTRAINED, LIMESTONE AGGREGATE, BROOM FINISHED, CURING SEAL.

SITE LEGEND

- HMA HMA PAVEMENT
- C4 C4 CURB AND GUTTER
- IC INTEGRAL CURB WALK
- CW CONCRETE WALK
- CS CONCRETE SURFACE
- PS PARKING STRIPING (10'x20')
- W WALL (TYPE)
- RB RETENTION BASIN
- DB DETENTION BASIN
- P POND
- G GRAVEL

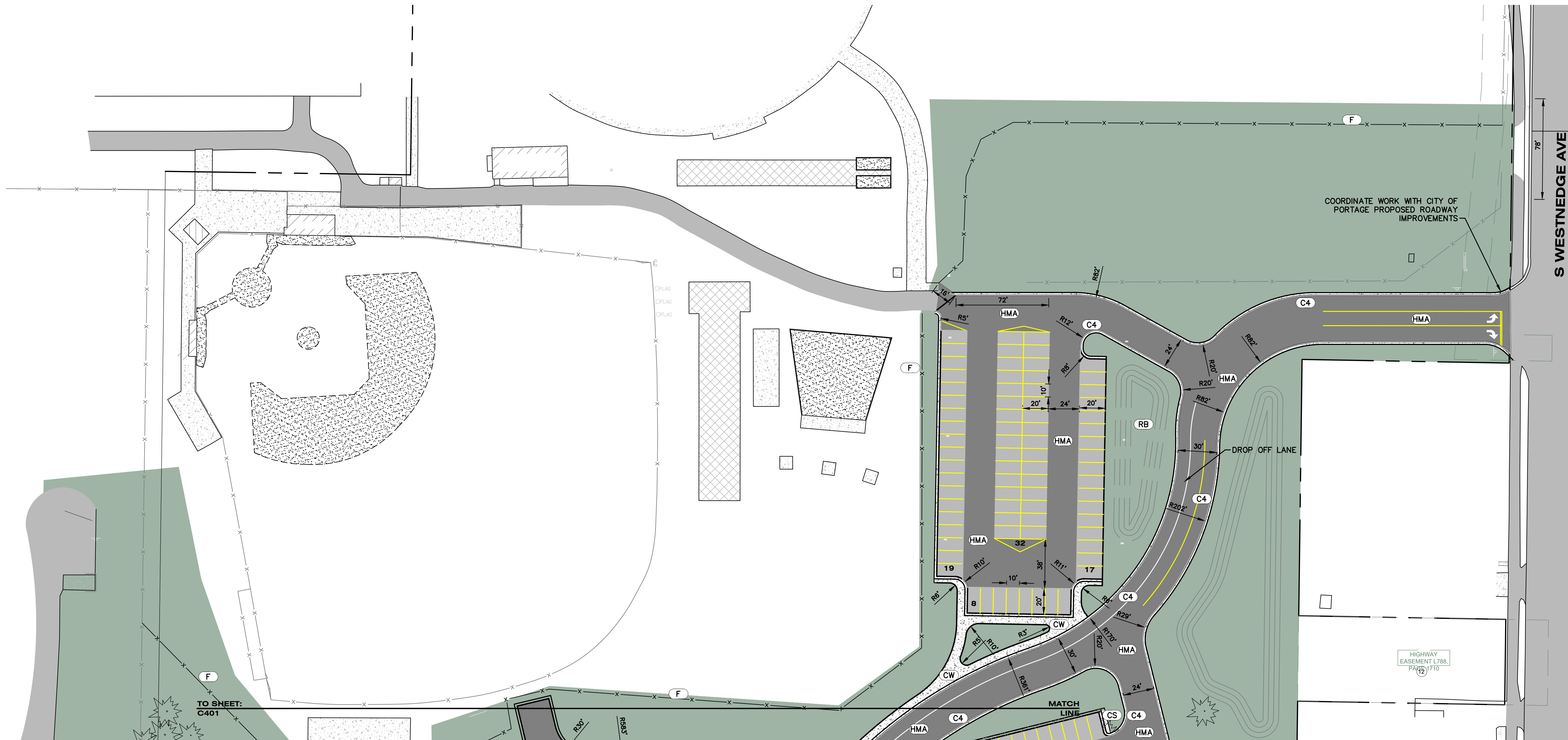
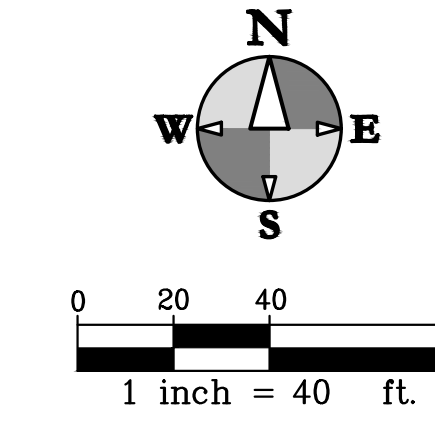
LEGEND

- STANDARD-DUTY BITUMINOUS PAVEMENT
- HEAVY-DUTY BITUMINOUS PAVEMENT
- CONCRETE PAVEMENT AND SIDEWALK
- HEAVY-DUTY CONCRETE PAVEMENT
- PLAYGROUND/MULCH AREA
- PROPOSED BUILDING
- PARKING STRIPING (BLUE)
- PARKING STRIPING (WHITE)
- PARKING STRIPING (YELLOW)
- CURB AND GUTTER

BENCHMARKS

BM #01 ELEVATION = 877.82  
NAIL IN NORTH SIDE OF POWER POLE  
LOCATED AT SOUTHEAST CORNER OF  
MARIGOLD AVE AND SOUTH WESTNEDGE AVE

BM #02 ELEVATION = 867.70  
NORTH EAST ANCHOR BOLT OF LIGHT POLE  
LOCATED ±200' NORTH AND ±90' WEST OF  
THE NORTH EAST SCHOOL BUILDING CORNER



ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
SITE LAYOUT PLAN - NORTH

DATE  
DECEMBER 21, 2022

SHEET NUMBER  
C 200  
21-237.11



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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

**NOTES**

1. PROVIDE CURB CUTS/RAMPS AT ALL BARRIER FREE ACCESS POINTS.
2. PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM TO THE CURRENT MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND MICHIGAN BARRIER FREE CODE.
3. SEE LANDSCAPE PLANS FOR HARDSCAPE, DETAILED GRADING IN LANDSCAPED AREAS AND SIGNAGE.
4. SEE ARCHITECTURAL PLANS FOR MORE DETAILS ON TRUCK DOCK WALLS, STAIRS, AND RAMPS.
5. MATCH EXISTING CURB & GUTTER SECTIONS WHEN CONNECTING TO THEM. CONDITIONS VARY THROUGHOUT PROJECT.
6. ALL SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
7. PLACE FIRE HYDRANT AND 'NO PARKING THIS SIDE OF STREET' SIGNS AT EACH HYDRANT LOCATION AND A 'NO PARKING THIS SIDE OF STREET' SIGN MIDWAY BETWEEN HYDRANTS.
8. LIGHT STANDARDS AND UTILITY POLES TO BE LOCATED A MINIMUM OF FIVE FEET FROM BACK-OF-CURB.
9. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
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**SITE LEGEND**

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- G) GRAVEL
- ADA) ADA PARKING

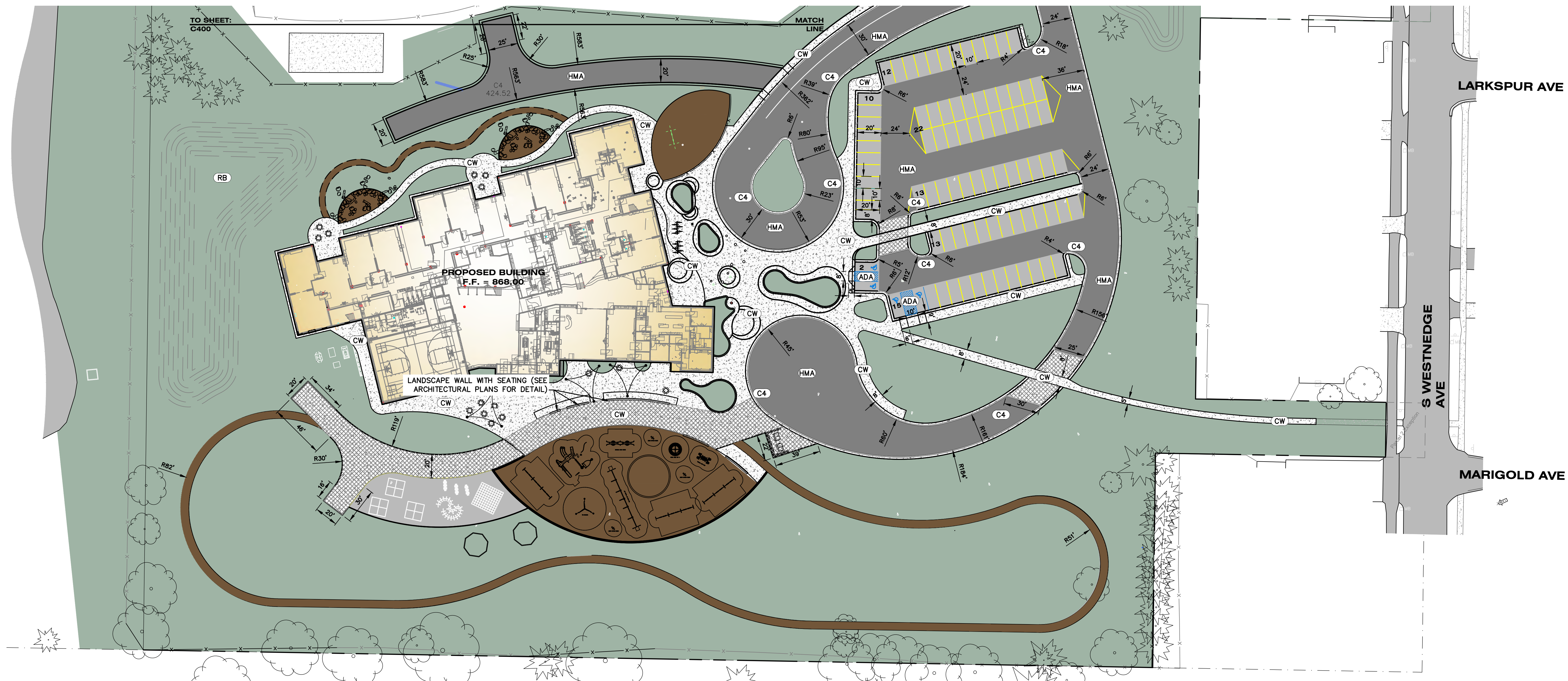
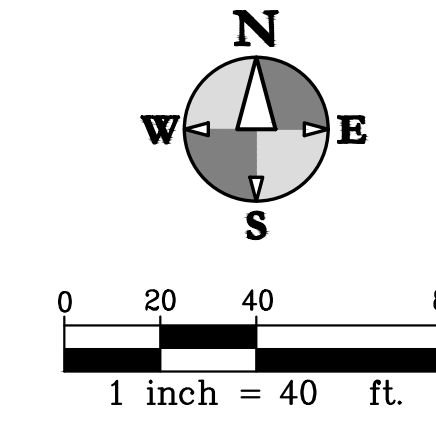
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- HEAVY-DUTY BITUMINOUS PAVEMENT
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- HEAVY-DUTY CONCRETE PAVEMENT
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CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
SITE LAYOUT PLAN - SOUTH

DATE  
DECEMBER 21, 2022

SHEET NUMBER  
C 201  
21-237.11

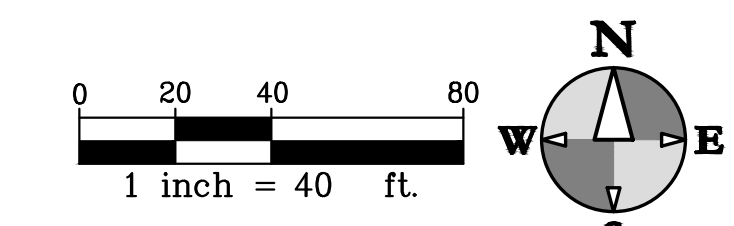


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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC



### GRADING PLAN LEGEND

- PROPOSED CONTOUR 5-FT
- PROPOSED CONTOUR NORMAL
- EXISTING CONTOUR 5-FT
- EXISTING CONTOUR NORMAL
- PROPOSED SPOT GRADE
- PROPOSED SPOT GRADES: TOP AND BOTTOM OF CURB/WALL
- EXISTING SPOT GRADE
- PROPOSED SURFACE SLOPE
- PROPOSED SILT FENCE
- PROPOSED GRADED SWALE
- SOIL BORING
- BENCH MARK
- SOIL EROSION MEASURE
- SEDIMENT CONTROL MEASURE
- GRADING LIMITS

### SESC NOTES

1. ALL WORK WILL COMPLY WITH THE PROVISIONS OF THE SOIL EROSION AND SEDIMENTATION CONTROL ACT (ACT 451 OF 1994, PART 91) ADMINISTERED BY THE COUNTY DRAIN COMMISSIONER.
2. FOR INSTALLATION SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES, REFER TO THE STATE OF MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT, AND BUDGET (DTMB) SESC MANUAL.
3. AVOID UNNECESSARY DISTURBING OR REMOVING EXISTING VEGETATED TOPSOIL OR EARTH COVER. THESE AREAS ACT AS SEDIMENT FILTERS.
4. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE SOIL EROSION CONTROL PERMIT FROM THE CITY OF PORTAGE.
5. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEANUP AND APPROVAL.
6. NO SITE WORK SHALL BEGIN UNTIL THE SILT FENCE AND ACCESS ROAD ARE INSTALLED.
7. ALL SOIL PILES SHALL BE SURROUNDED BY SILT FENCE IF ALLOWED TO REMAIN IN PLACE FOR MORE THAN 7 DAYS. TOPSOIL PILES SHALL BE SEEDED IF ALLOWED TO REMAIN IN PLACE FOR MORE THAN

8. THE CONTRACTOR SHALL COMPLY WITH THE WEEKLY RECOMMENDATIONS OF THE CERTIFIED STORM WATER OPERATOR.
9. ALL INLETS IN PAVED AREAS SHALL HAVE SILT SAVER SEDIMENTATION REDUCERS DURING CONSTRUCTION.
10. FINAL LANDSCAPING SHALL CONSIST OF MIN. 3" TOPSOIL, 200#/ACRE CLASS A SEEDING, 27/ACRE MULCH AND 240#/ ACRE CHEMICAL FERTILIZER NUTRIENT.
11. SEE PLAN AND PROFILE SHEETS FOR ROADWAY GRADING AND UTILITIES.
12. SEE RETENTION BASIN PLAN FOR SESC DEVICES IN THAT AREA.
13. COORDINATE TOPSOIL STOCKPILE WITH OWNER.
14. PLACE TRACK MATS AT THE ENTRANCE OF SITE TO REDUCE MATERIAL TRACKED OFF SITE.
15. COORDINATE THE CLEARING LIMITS WITH THE OWNER PRIOR TO COMMENCING WORK.
16. IT IS THE INTENT FOR THE EARTHWORK TO BALANCE AND THE CONTRACTOR IS RESPONSIBLE FOR

17. PLACE "DO NOT ENTER CONSTRUCTION ZONE" SIGNS AT ALL ENTRY POINTS TO PROJECT.
18. PROVIDE SILT SACKS IN EACH CATCH BASIN UNTIL SITE IS STABILIZED.
19. ALL SOIL EROSION MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING WORK.
20. PLACE SILT FENCES ALONG THE TOE OF TOPSOIL STOCKPILES AND OTHER FILL AREAS. SEED TOPSOIL STOCKPILE AND MAINTAIN SILT FENCES UNTIL SITE IS STABILIZED.
21. MAINTAIN A VEGETATIVE BUFFER WHEREVER POSSIBLE.
22. SEE LANDSCAPING PLAN FOR FINAL SLOPE TREATMENTS.
23. PLACE TOPSOIL AND SEED ACCORDING TO THE LANDSCAPE PLANS AS SOON AS AREAS ARE BROUGHT TO GRADE.
24. CLEAN ADJACENT ROADWAYS WHEN NECESSARY.
25. WATER SITE WHEN NECESSARY TO PREVENT AIR BORNE SEDIMENT TRANSFER.
26. PLACE MULCH BLANKET AN ALL SLOPES 1 ON 3 OR STEEPER.

### GRADING NOTES

1. MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN. MATCH AT 1 ON 6 IF NOT LABELED.
2. THE CONTRACTOR SHALL INSTALL PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
3. ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
4. ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
5. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND GEOTECHNICAL REPORT.
6. ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
7. REMOVE AND REPLACE WITH CONTROLLED FILL ANY AREAS THAT HAVE BEEN SOFTENED BY RAINS, FREEZING, CONSTRUCTION EQUIPMENT, ETC.
8. ALL REQUIRED FILL FOR THIS PROJECT SHALL BE SELECTED EXCAVATED MATERIAL FROM THE SITE APPROVED BY THE ENGINEER OR CLASS II GRANULAR MATERIAL FROM BORROW AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
9. ALL GRANULAR FILL UNDER THE INFLUENCE OF THE ROADWAY AND PROCESSED ROAD GRAVEL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
10. ALL COMPACTION SHALL BE ACCOMPLISHED BY PLACING THE FILL IN 12" LOOSE LIFTS AND MECHANICALLY COMPACTING EACH LIFT TO AT LEAST THE SPECIFIED MINIMUM DRY DENSITY. FIELD DENSITY TESTS SHOULD BE PERFORMED ON EACH LIFT AS NECESSARY TO ENSURE THAT ADEQUATE MOISTURE CONDITIONS AND COMPACTION ARE BEING ACHIEVED.
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12. CONTRACTOR RESPONSIBLE FOR VERIFYING EARTHWORK CALCULATIONS PRIOR TO COMMENCING WORK. NO EXTRA EARTHWORK WILL BE PAID FOR ONCE EARTHWORK HAS BEGUN. ANY DISCREPANCIES WITH THE EARTHWORK CALCULATIONS SHALL BE REVIEWED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
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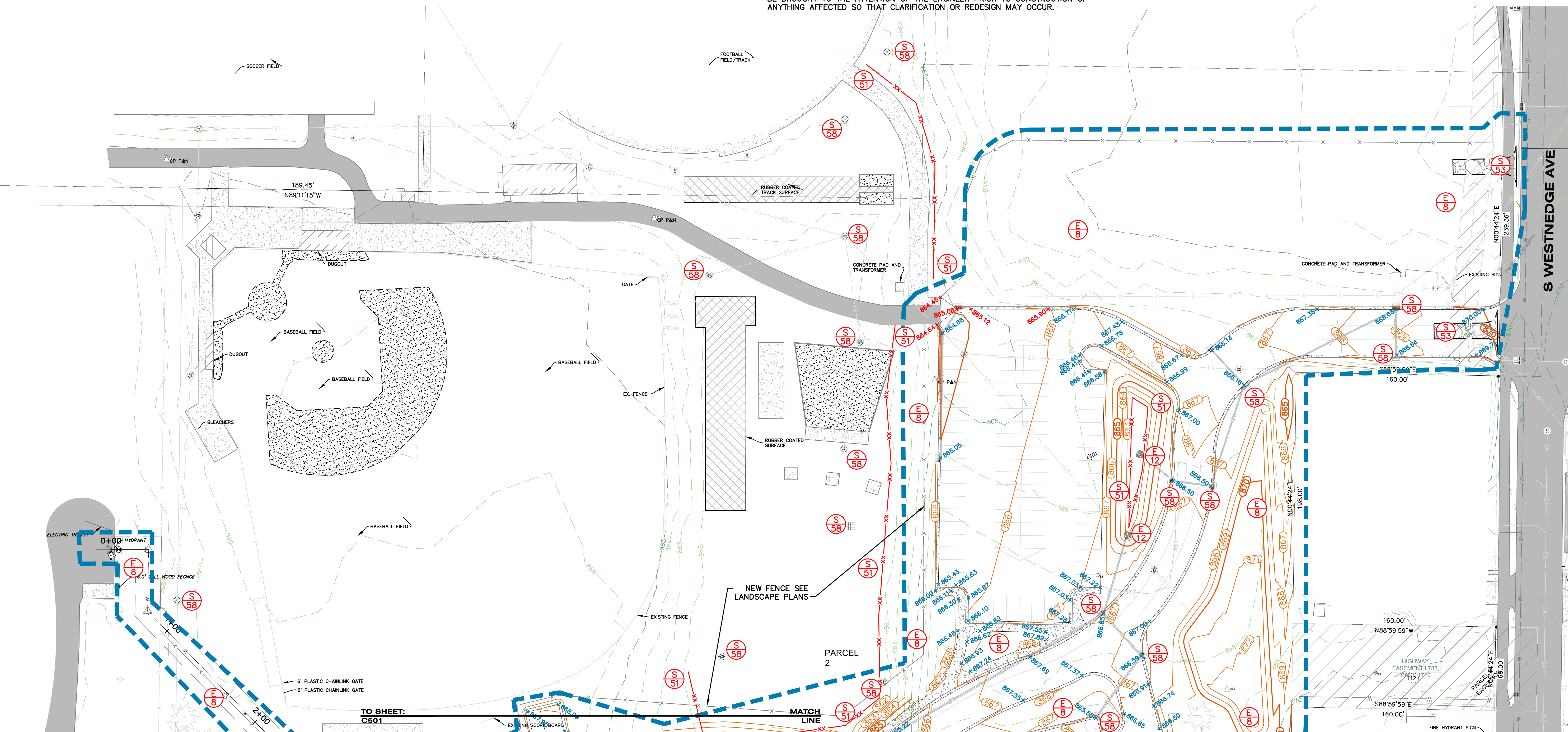
### SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
E8	PERMANENT SEEDING		Stabilization method utilized on sites where earth change has been completed (final grading attained).
E12	RIPRAP		Use along shorelines, waterways, or where concentrated flows occur. Slows velocity, reduces sediment load, and reduces erosion.
S51	SILT FENCE		Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
S53	STABILIZED CONSTRUCTION ACCESS		Used at every point where construction traffic enters or leaves a construction site.
S58	INLET PROTECTION FABRIC DROP		Use at stormwater inlets, especially at construction sites.

### BENCHMARKS

BM #01 ELEVATION = 877.82  
NAIL IN NORTH SIDE OF POWER POLE LOCATED AT SOUTHEAST CORNER OF MARIGOLD AVE AND SOUTH WESTNEDGE AVE

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NORTH EAST ANCHOR BOLT OF LIGHT POLE LOCATED ±200' NORTH AND ±90' WEST OF THE NORTH-EAST SCHOOL BUILDING CORNER



ISSUED FOR \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT TITLE  
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CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
SITE GRADING PLAN - NORTH

DATE  
DECEMBER 21, 2022

SHEET NUMBER  
C 300  
21-237.11



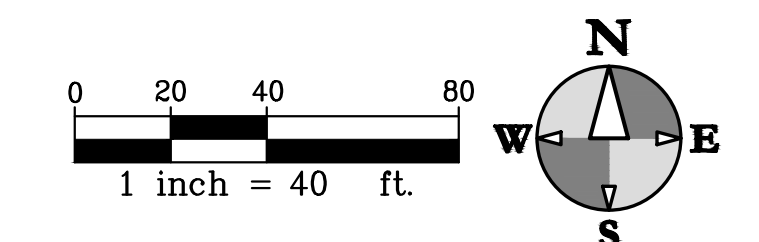


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GRADING PLAN LEGEND

- 720 PROPOSED CONTOUR 5-FT
- 719 PROPOSED CONTOUR NORMAL
- 720 EXISTING CONTOUR 5-FT
- 719 EXISTING CONTOUR NORMAL
- x 896.32 PROPOSED SPOT GRADE
- x 894.76 TOP AND BOTTOM OF CURB/WALL
- x 895.25 EXISTING SPOT GRADE
- 11.2 25.2 PROPOSED SURFACE SLOPE
- xx PROPOSED SILT FENCE
- SB-11 PROPOSED GRADED SWALE
- BM XXX SOIL BORING
- BM XXX BENCH MARK
- S XX SOIL EROSION MEASURE
- S XX SEDIMENT CONTROL MEASURE
- GRADING LIMITS

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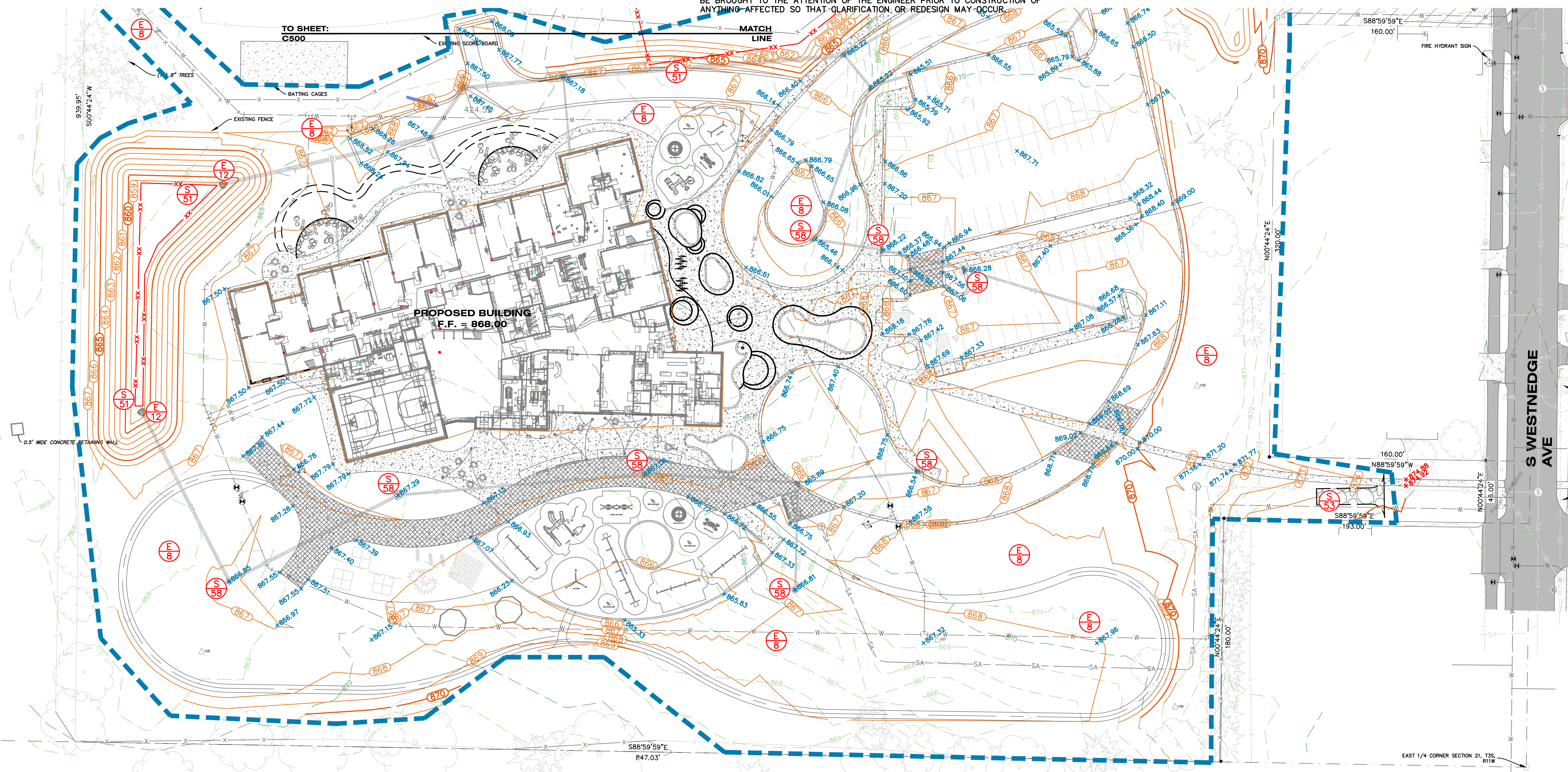
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SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
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S51	SILT FENCE	[Symbol]	Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
S53	STABILIZED CONSTRUCTION ACCESS	[Symbol]	Used at every point where construction traffic enters or leaves a construction site.
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BENCHMARKS

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OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

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SITE GRADING PLAN - SOUTH  
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OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
SITE SESC NOTES & SCHEDULE

SHEET NUMBER  
C 302  
21-237.11

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### SOIL EROSION CONTROL MAINTENANCE TASKS AND SCHEDULE

#### SESC NOTES

- ALL WORK WILL COMPLY WITH THE PROVISIONS OF THE SOIL EROSION AND SEDIMENTATION CONTROL ACT (PA 451, PART 91 OF 1994 AS AMENDED) ADMINISTERED BY THE CITY OF PORTAGE.
- SITES WITH DISTURBANCE LARGER THAN 5 ACRES NEED TO FOLLOW THE SOIL EROSION AND SEDIMENTATION CONTROL GUIDEBOOK BY THE STATE OF MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET OFFICE OF FACILITIES, DESIGN AND CONSTRUCTION DIVISION.
- AVOID UNNECESSARY DISTURBING OR REMOVING EXISTING VEGETATED TOPSOIL OR EARTH COVER. THESE AREAS ACT AS SEDIMENT FILTERS.
- ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL SITE IS ESTABLISHED.
- PROVIDE INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES DURING CONSTRUCTION.
- NO SITE WORK SHALL BEGIN UNTIL THE SILT FENCE AND ACCESS ROAD ARE INSTALLED.
- ALL SOIL PILES SHALL BE SURROUNDED BY SILT FENCE IF ALLOWED TO REMAIN IN PLACE FOR MORE THAN 7 DAYS. TOPSOIL PILES SHALL BE SEEDED IF ALLOWED TO REMAIN IN PLACE FOR MORE THAN 20 DAYS. SPOIL PILES SHALL NOT BE PLACED WITHIN 50' FROM ANY TEMPORARY OR PERMANENT WATERCOURSE.
- THE CONTRACTOR SHALL COMPLY WITH THE WEEKLY RECOMMENDATIONS OF THE CERTIFIED STORM WATER OPERATOR.
- ALL INLETS IN PAVED AREAS SHALL HAVE INLET PROTECTION DURING CONSTRUCTION.
- COORDINATE TOPSOIL STOCKPILE WITH OWNER.
- PLACE TRACK MATS AT THE ENTRANCE OF SITE TO REDUCE MATERIAL TRACKED OFF SITE.
- COORDINATE THE CLEARING LIMITS WITH THE OWNER PRIOR TO COMMENCING WORK.
- PLACE "DO NOT ENTER CONSTRUCTION ZONE" SIGNS AT ALL ENTRY POINTS TO PROJECT.
- PROVIDE SILT SACKS IN EACH CATCH BASIN UNTIL SITE IS STABILIZED.
- ALL SOIL EROSION MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING WORK.
- PLACE SILT FENCES ALONG THE TOE OF TOPSOIL STOCKPILES AND OTHER FILL AREAS. SEED TOPSOIL STOCKPILE AND MAINTAIN SILT FENCES UNTIL SITE IS STABILIZED.
- MAINTAIN A VEGETATIVE BUFFER WHEREVER POSSIBLE.
- CLEAN ADJACENT ROADWAYS WHEN NECESSARY.
- WATER SITE WHEN NECESSARY TO PREVENT AIR BORNE SEDIMENT TRANSFER.
- CONTRACTOR TO COMPLETE AND SUBMIT A SOIL EROSION AND SEDIMENT CONTROL PERMIT APPLICATION TO THE CITY. THE FEE AND BOND ARE REQUIRED.
- CONTRACTOR TO INSTALL A PERMIT BOX ON SITE AND PLACE WEATHER CARD AND LAMINATED 11X17 REDUCTION OF APPROVED SESC PLANS. CONTRACTOR TO PRINT AND LAMINATE THE 11X17 REDUCTION OF THE APPROVED SESC PLANS.

#### DURING CONSTRUCTION TO BE PERFORMED BY CONTRACTOR

TASKS	COMPONENTS	PAVED AREAS	STORM DRAINAGE SYSTEM	CATCH BASIN SUMPS	CATCH BASIN INLET CASTINGS	SITE DISTURBED AREA	SCHEDULE
INSPECT FOR SEDIMENT ACCUMULATION			X	X	X	X	WEEKLY
REMOVAL OF SEDIMENT ACCUMULATION			X	X		X	AS NEEDED* AND PRIOR TO TURNOVER
INSPECT FOR FLOATABLES AND DEBRIS			X	X	X		QUARTERLY
CLEANING FOR FLOATABLES AND DEBRIS			X	X	X		QUARTERLY AND AT TURNOVER
INSPECTION FOR EROSION						X	WEEKLY
REESTABLISH PERMANENT VEGETATION ON ERODED SLOPES						X	AS NEEDED AND PRIOR TO TURNOVER
INSPECT STRUCTURAL ELEMENTS DURING WET WEATHER AND COMPARE TO AS-BUILT PLANS (BY A PROFESSIONAL ENGINEER REPORTING TO THE OWNER)			X				ANNUALLY AND AT TURNOVER
MAKE ADJUSTMENTS OR REPLACEMENTS AS DETERMINED			X			X	AS NEEDED

\* "AS NEEDED" MEANS WHEN SEDIMENT HAS ACCUMULATED TO A MAXIMUM OF ONE FOOT DEPTH

#### PERMANENT MAINTENANCE TO BE PERFORMED BY THE DEPARTMENT OF TRANSPORTATION AND UTILITIES

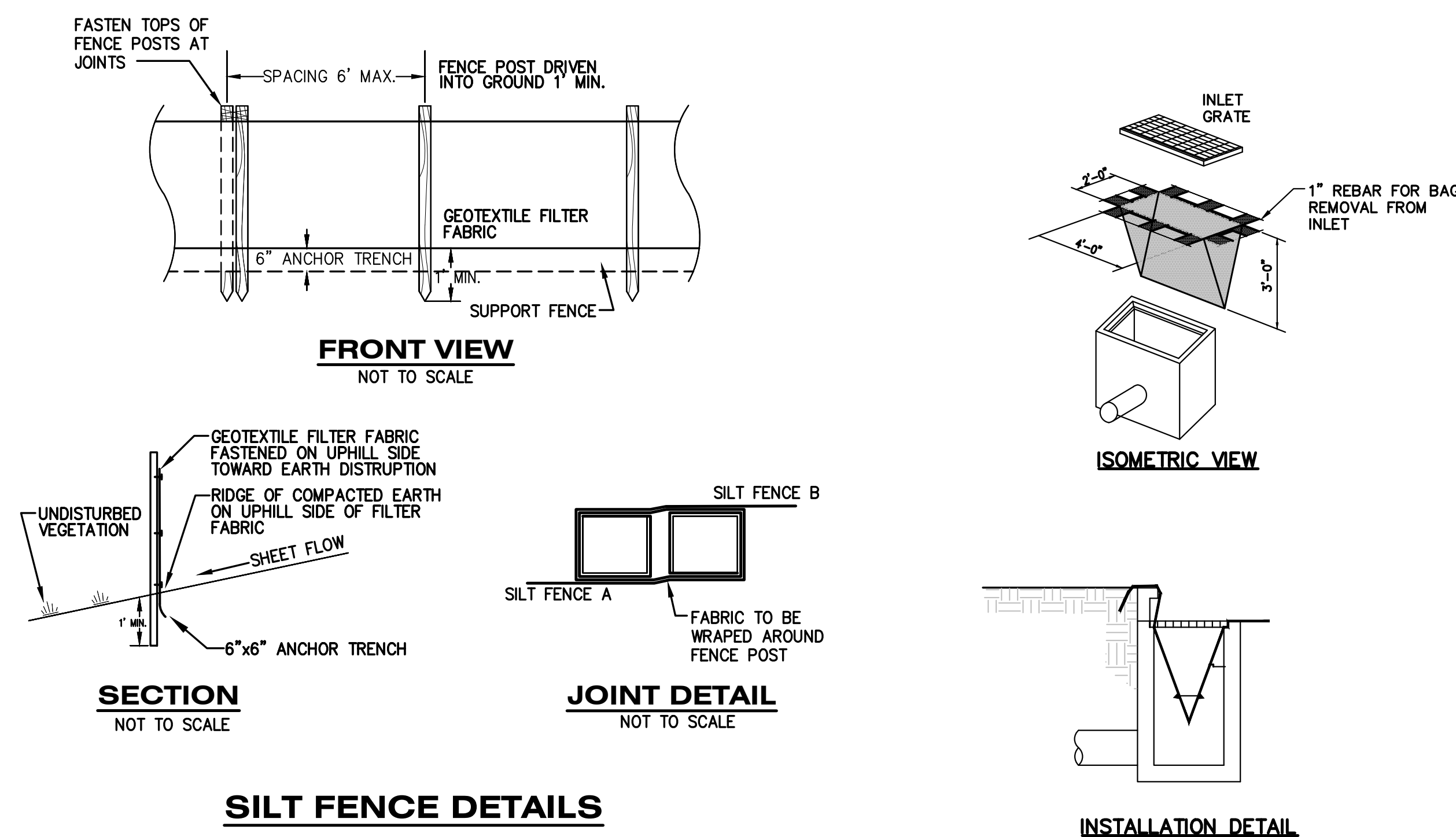
TASKS	COMPONENTS	PAVED AREAS	STORM DRAINAGE SYSTEM	CATCH BASIN SUMPS	CATCH BASIN INLET CASTINGS	SCHEDULE
INSPECT FOR SEDIMENT ACCUMULATION			X	X		SEMI-ANNUALLY AS NEEDED*
REMOVAL OF SEDIMENT ACCUMULATION			X	X		ANNUALLY AS NEEDED*
INSPECT FOR FLOATABLES AND DEBRIS			X	X	X	ANNUALLY
CLEANING FOR FLOATABLES AND DEBRIS			X	X	X	ANNUALLY
INSPECTION FOR EROSION						ANNUALLY
REESTABLISH PERMANENT VEGETATION ON ERODED SLOPES						AS NEEDED
CLEAN DRIVES AND PARKING LOTS		X				SEMI-ANNUALLY
INSPECT STRUCTURAL ELEMENTS DURING WET WEATHER AND COMPARE TO AS-BUILT PLANS (BY A PROFESSIONAL ENGINEER REPORTING TO THE OWNER)			X			SEMI-ANNUALLY
MAKE ADJUSTMENTS OR REPLACEMENTS AS DETERMINED BY ANNUAL WET WEATHER INSPECTION			X			ANNUALLY
OWNER TO HAVE A PROFESSIONAL ENGINEER CARRY OUT EMERGENCY INSPECTIONS UPON IDENTIFICATION OF SEVERE PROBLEMS			X	X	X	AS NEEDED

\* "AS NEEDED" MEANS WHEN SEDIMENT HAS ACCUMULATED TO A MAXIMUM OF ONE FOOT DEPTH

PRELIMINARY CONSTRUCTION SCHEDULE						
	MARCH	APRIL	MAY	JUNE	JULY	
INSTALL TEMPORARY MEASURES	X					
PERFORM EARTHWORK		X				
INSTALL PERMANENT MEASURES		X				
RESTORATION			X			
SUBSTANTIAL COMPLETION			X	X		
FINAL COMPLETION				X	X	

#### MAINTENANCE AFTER CONSTRUCTION:

- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY THE CONTRACTOR ONLY AFTER THE ENTIRE SITE HAS BEEN RESTORED.
- CITY OF PORTAGE SHALL MAINTAIN STORM DRAINAGE IMPROVEMENTS.
- FUTURE BUILDING AND SITE PHASES SHALL BE COMPLETED UNDER A SEPARATE OR AMENDED SESC PERMIT AND NOT SHOWN HERE.





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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

**GRADING - SESC NOTES**

- MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN.
- ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
- ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
- ALL EXCAVATION AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT, GEOTECHNICAL REPORT PROJECT NO. 2250349.3A ISSUED 07/28/2022.
- ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID TRACKING SOIL ONTO ADJACENT ROADWAYS. SCRAPE ROAD AT THE END OF EACH WORKDAY AND SWEEP AT LEAST ONCE A WEEK.
- ANY DISTURBED AREA THAT WILL BE LEFT UNWORKED 5 DAYS OR LONGER MUST BE SEEDED AND MULCHED OR SODDED TO ESTABLISH VEGETATION FOR TEMPORARY STABILIZATION. BASINS TO BE SEEDED AND MULCH BLANKETS APPLIED IMMEDIATELY TO PROVIDE A STABLE BASE AND AVOID EXCESSIVE EROSION.
- STRAW MULCH BLANKETS SHALL BE USED ON 3:1 SLOPES OR GREATER. ALL SLOPES ON SITE SHALL BE 4:1 OR LESS, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- AREAS OF EARTH CHANGE THAT ARE DISTURBED BEYOND THE FALL SEEDING DEADLINE (NOV. 1) MUST BE TEMPORARILY STABILIZED WITH A MINIMUM OF STRAW MULCH SECURELY CRIMPED TO THE GROUND.
- ACCUMULATED SEDIMENT TO BE REMOVED FROM STORM SYSTEM UPON COMPLETION OF CONSTRUCTION. ALL TEMPORARY CONTROLS TO BE REMOVED AFTER SITE IS STABILIZED AND VEGETATION ESTABLISHED.

**GRADING PLAN LEGEND**

- PROPOSED CONTOUR 5-FT
- PROPOSED CONTOUR NORMAL
- EXISTING CONTOUR 5-FT
- EXISTING CONTOUR NORMAL
- PROPOSED SPOT GRADE
- PROPOSED SPOT GRADES: TOP AND BOTTOM OF CURB/WALL
- EXISTING SPOT GRADE
- PROPOSED SURFACE SLOPE
- GRADING LIMITS
- BENCH MARK

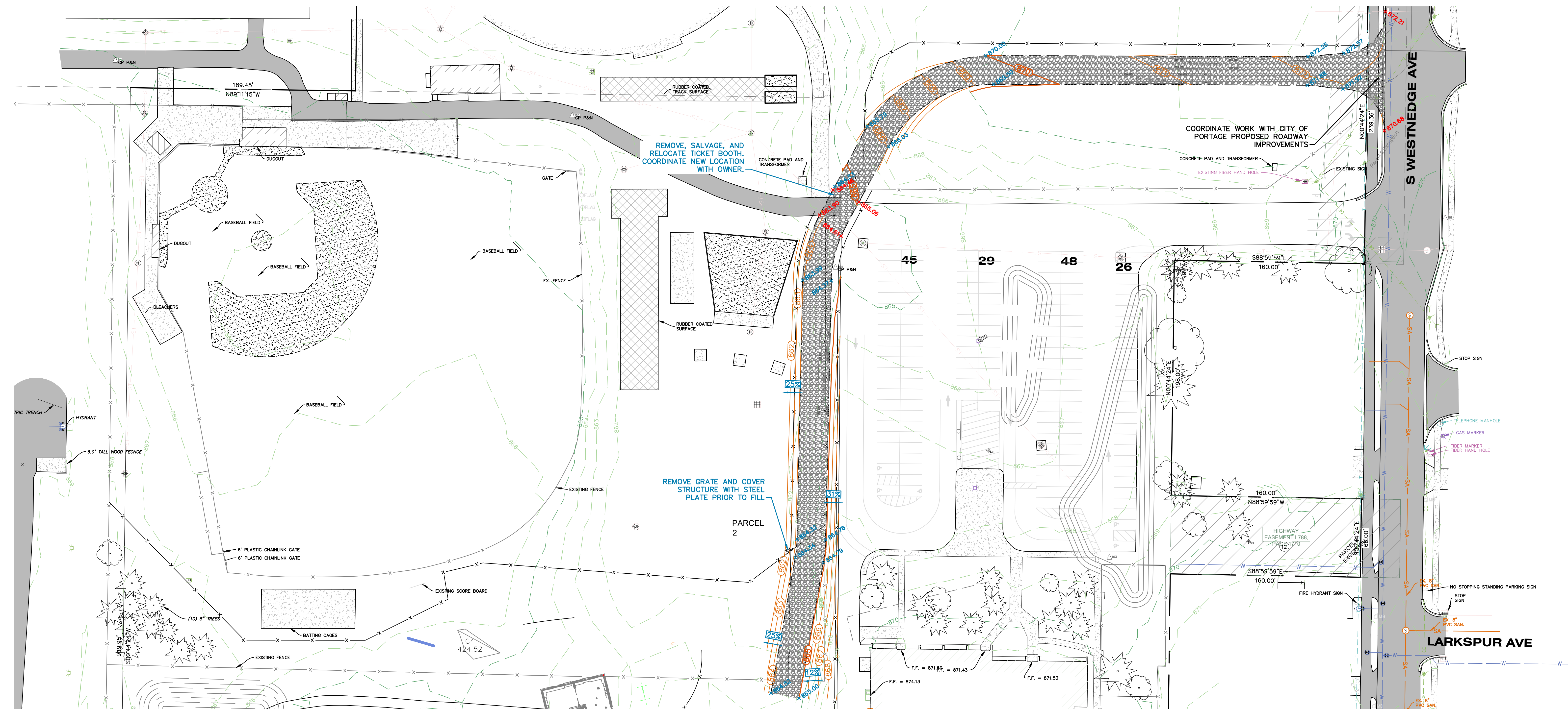
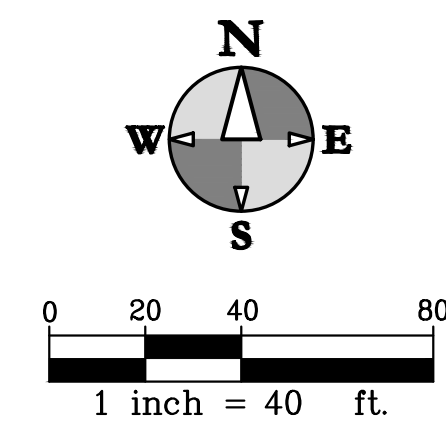
**BENCHMARKS**

BM #01 ELEVATION = 877.82  
NAIL IN NORTH SIDE OF POWER POLE  
LOCATED AT SOUTHEAST CORNER OF  
MARIGOLD AVE AND SOUTH WESTNEDGE AVE

BM #02 ELEVATION = 867.70  
NORTH EAST ANCHOR BOLT OF LIGHT POLE  
LOCATED ±200' NORTH AND ±90' WEST OF  
THE NORTH EAST SCHOOL BUILDING CORNER

**LEGEND**

- PROPOSED PLAYGROUND RELOCATION AREA



ISSUED FOR \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
TEMP. PLAYGROUND  
RELOCATION & DRIVE ENTRANCE  
GRADING PLAN-NORTH

SHEET NUMBER  
C 303  
21-237.11

DATE  
DECEMBER 21, 2022



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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

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**GRADING PLAN LEGEND**

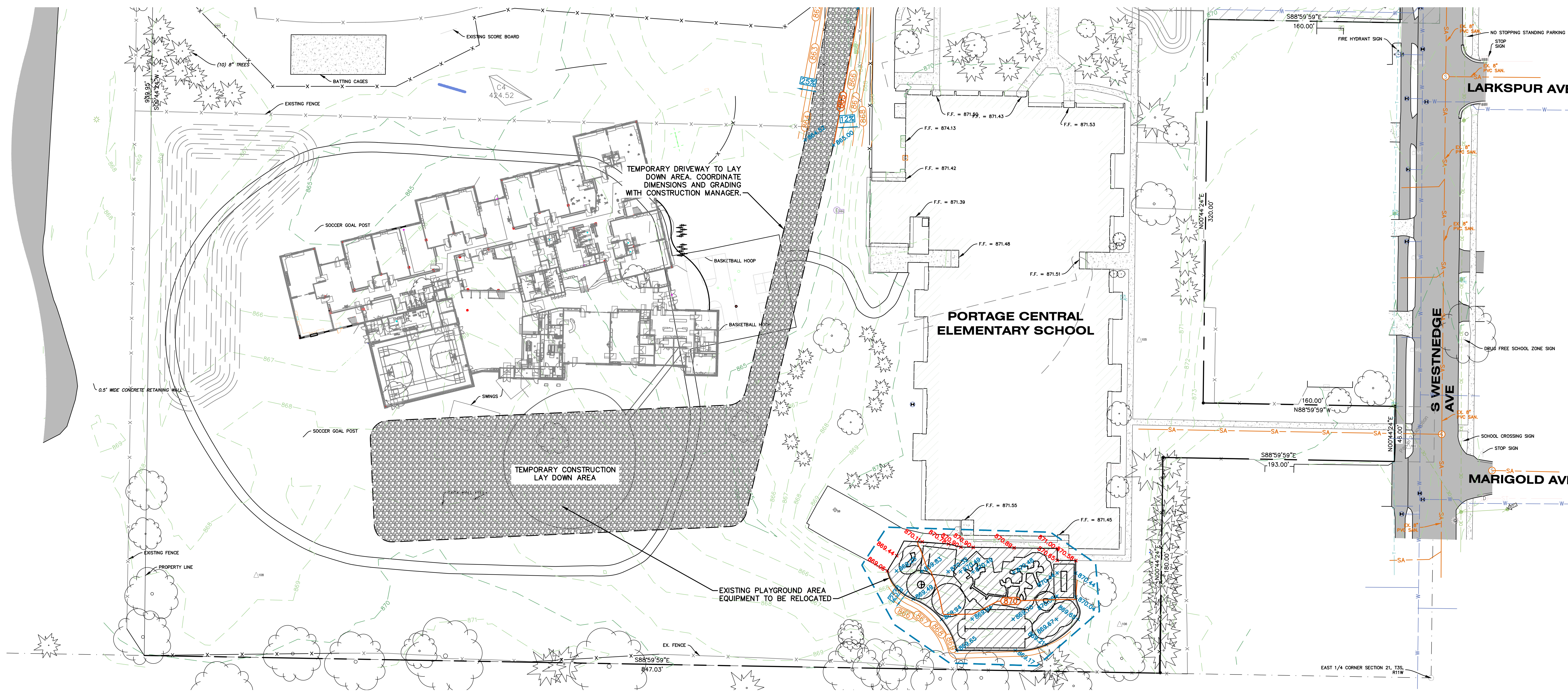
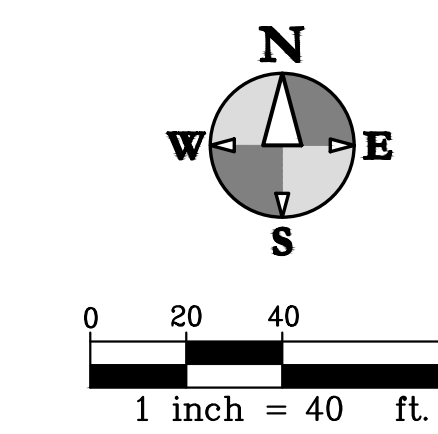
- PROPOSED CONTOUR 5-FT (720)
- PROPOSED CONTOUR NORMAL (719)
- EXISTING CONTOUR 5-FT (-720)
- EXISTING CONTOUR NORMAL (-719)
- PROPOSED SPOT GRADE (x 896.32)
- PROPOSED SPOT GRADES: TOP AND BOTTOM OF CURB/WALL (x 894.76 TOP, x 894.26 BTM)
- EXISTING SPOT GRADE (x 895.25)
- PROPOSED SURFACE SLOPE (1:4, 2.5%)
- GRADING LIMITS
- BENCH MARK (BM #XX)

**BENCHMARKS**

BM #01 ELEVATION = 877.82  
NAIL IN NORTH SIDE OF POWER POLE LOCATED AT SOUTHEAST CORNER OF MARIGOLD AVE AND SOUTH WESTNEDGE AVE  
BM #02 ELEVATION = 867.70  
NORTH EAST ANCHOR BOLT OF LIGHT POLE LOCATED ±200' NORTH AND ±90' WEST OF THE NORTH EAST SCHOOL BUILDING CORNER

**LEGEND**

- PROPOSED PLAYGROUND RELOCATION AREA



ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
TEMP. PLAYGROUND  
RELOCATION & DRIVE ENTRANCE  
GRADING PLAN-SOUTH  
SHEET NUMBER  
C 304  
DATE  
DECEMBER 21, 2022  
21-237.11



Know what's below. Call before you dig.



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hurley & stewart, llc  
2800 s. 11th street  
kalamazoo, michigan 49009  
269.552.4960 fax 269.552.4961  
www.hurleystewart.com

STR. #	RIM EL.	DIAM.	CASTING	PIPES IN:	PIPES OUT
**LB-24	867.96	4'	7045 M2	12" N: 857.52	
**LB-25	864.66	4'	7045 M2	12" NE: 857.52 12" S: 857.52	12" NW: 857.52
**LB-26	865.08	2'	7045 M2		12" SW: 857.52
STM-2	867.69	5'	1040A	30" E: 859.08 12" S: 862.22	30" W: 859.08
STM-3	867.48	4'	7045 M2	12" S: 862.28 24" NE: 859.15	30" W: 859.15
STM-4	867.21	5'	7045 M2	30" E: 859.22	24" SW: 859.22
STM-5	867.18	4'	7045 M2	30" E: 859.29 12" S: 862.47	30" W: 859.29
STM-6	865.22	5'	7045 M2	18" SE: 859.50 18" NE: 859.50	30" W: 859.50
STM-7	865.22	4'	7045 M2	18" E: 859.56 18" S: 859.56	18" NW: 859.56
STM-8	865.46	4'	7045 M2	18" E: 859.80	18" N: 859.80
STM-9	866.22	4'	7045 M2	18" E: 859.90	18" W: 859.90
STM-10	866.28	4'	7045 M2	18" E: 860.03	18" W: 860.03
STM-11	866.28	4'	7045 M2		18" W: 860.27
STM-12	865.51	4'	7045 M2		18" W: 859.62
STM-13	866.85	5'	7045 M2	18" SE: 859.89 12" N: 862.41	18" SW: 859.89

STR. #	RIM EL.	DIAM.	CASTING	PIPES IN:	PIPES OUT
STM-14	866.59	4'	7045 M2	18" SW: 859.98	18" NW: 859.98
STM-15	865.55	4'	7045 M2		18" NE: 860.10
STM-18	866.50	4'	7045 M2	12" E: 862.89	12" NW: 862.89
STM-19	866.50	4'	7045 M2	12" N: 863.04	12" W: 863.04
STM-20	866.16	4'	7045 M2	12" NW: 863.46 12" NE: 863.46	12" S: 863.46
STM-21	868.63	4'	7045 M2	12" S: 864.13	12" SW: 864.13
STM-22	868.63	4'	7045 M2		12" N: 864.31
STM-23	866.14	4'	7045 M2		12" SE: 863.64
STM-28	866.85	5'	1040 M1	24" NE: 859.68	24" NW: 859.68
STM-29	867.29	4'	5105 M3	18" E: 860.39	24" SW: 860.39
STM-30	867.06	4'	5105 M3	18" E: 861.30	18" W: 861.30
STM-31	865.89	4'	7045 M2	12" E: 861.87 12" S: 861.87	18" W: 861.87
STM-32	866.54	4'	7045 M2		12" W: 862.31
STM-33	866.81	2'	1040 M1		12" N: 862.26

\* EXISTING  
\*\* LEACHING BASIN (SEE DETAIL)

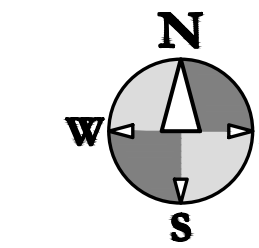
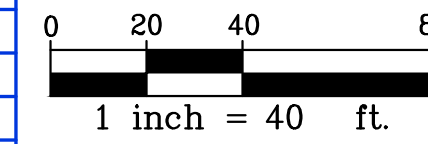
LEGEND

DEFLECT WATER MAIN 18" UNDER PIPE CONFLICT (SEE DETAIL)

NOTE: CONTRACTOR RESPONSIBLE FOR VERIFYING FITTINGS. AMOUNTS DO NOT TAKE INTO CONSIDERATION VERTICAL DEFLECTIONS.

WATER MAIN FITTING SCHEDULE

FITTING NUMBER	DESCRIPTION	TOTAL THIS SHEET
①	90° BEND	1
②	45° BEND	1
③	22.5° BEND	0
④	8" X 8" X 8" TEE	0
⑤	8" X 8" X 6" TEE	1
⑥	8" X 8" X 4" TEE	0
⑦	8" X 6" REDUCER	0
⑧	2" TAP	0
⑨	HYDRANT ASSEMBLY AND VALVE	0
⑩	8" GATE VALVE	1



UTILITY NOTES

- PLACE SANITARY CLEANOUT EVERY 100' AND/OR AT BENDS ON ALL 6" SANITARY SEWER LEADS.
- ALL STRUCTURE CASTINGS TO BE EAST JORDAN IRON WORKS OR APPROVED EQUAL. SEE STRUCTURE TABLE FOR SPECIFIC CASTING AT EACH STRUCTURE.
- STORM SEWERS SHALL BE CONCRETE C76-III, SOLID WALL ADS N-12 RIGID PIPE MEETING AASHTO M-294, TYPE S, OR APPROVED EQUAL INSTALLED PER THE REQUIREMENTS OF MDOT AND THE CITY OF PORTAGE. MANDREL TESTING SHALL BE PERFORMED PRIOR TO PAVING. USE CONCRETE PIPE WHERE INDICATED.
- ALL WATER MAIN INSTALLED IN GROUNDWATER SHALL BE WRAPPED WITH POLYETHYLENE.
- THE CONTRACTOR SHALL INSTALL PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
- CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR GROUNDWATER AND SOILS INFORMATION. ANY UTILITIES REQUIRING DEWATERING SHALL BE INSTALLED TO THE CITY OF PORTAGE STANDARDS AND INCLUDED IN THE INSTALLATION COSTS. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING NECESSARY TO CONSTRUCT UTILITIES IN THE DRY.
- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
- DEWATERING MAY BE REQUIRED TO INSTALL OR REMOVE SOME UTILITIES. REFER TO SPECIFICATIONS FOR SPECIFIC REQUIREMENTS. REFER TO GEOTECHNICAL REPORT FOR MORE INFORMATION.
- COORDINATE ALL UTILITY LOCATIONS AND ELEVATIONS WITH MECHANICAL DRAWINGS AND BUILDING CONTRACTOR PRIOR TO INSTALLATION.
- REMOVE SEDIMENT FROM ALL STRUCTURES ONCE PAVING IS COMPLETE AND REMOVE SILT SACKS.
- VERIFY NUMBER OF FITTINGS PRIOR TO ORDERING. TOTALS DO NOT INCLUDE VERTICAL DEFLECTIONS THAT MAY BE NEEDED.
- PROVIDE 18" WATER MAIN SEPARATION WHEN CROSSING OTHER UTILITIES. DEFLECT UNDER OTHER UTILITIES W/O USING FITTINGS WHENEVER POSSIBLE. SEE WATER MAIN PROFILE SHEET.
- SITE CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL UTILITIES TO 5' FROM BUILDING WALL. PORTAGE REQUIREMENTS.
- VERIFY LOCATION AND ELEVATION OF EXISTING SANITARY LEAD PRIOR TO ORDERING STRUCTURES AND CONSTRUCTION.
- SEE SITE ELECTRICAL PLAN FOR LOCATION OF ALL ELECTRICAL SLEEVES AND CONDUIT.
- CONTRACTOR MAY ELECT TO USE CASTING 7055M2 IN CURB AND GUTTER LOCATIONS. (SEE SCHEDULE AT RIGHT)
- WATER METER FOR PROPOSED BUILDING SHALL BE LOCATED INSIDE OUTDOOR VAULT.



ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
SITE UTILITY PLAN - NORTH

DATE  
DECEMBER 21, 2022

SHEET NUMBER  
C 400  
21-237.11



hurley & stewart, llc  
2800 s. 11th street  
kalamazoo, michigan 49009  
269.552.4960 fax 269.552.4961  
www.hurleystewart.com

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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

**STORM SEWER STRUCTURE SCHEDULE**

STR. #	RIM EL.	DIAM.	CASTING	PIPES IN:	PIPES OUT
**LB-24	867.96	4'	7045 M2	12" N: 857.52	12" S: 857.52 12" NW: 857.52*
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\* EXISTING  
\*\* LEACHING BASIN (SEE DETAIL)

**WATER MAIN FITTING SCHEDULE**

FITTING NUMBER	DESCRIPTION	TOTAL THIS SHEET
①	90° BEND	2
②	45° BEND	6
③	22.5° BEND	4
④	8" X 8" 8" TEE	4
⑤	8" X 8" 4" TEE	3
⑥	8" X 8" 4" TEE	1
⑦	8" X 6" REDUCER	2
⑧	2" TAP	1
⑨	HYDRANT ASSEMBLY AND VALVE	4
⑩	8" GATE VALVE	4

**SANITARY SEWER STRUCTURE SCHEDULE**

STR. #	RIM EL.	DIAM.	CASTING	PIPES IN:	PIPES OUT
SMH-1*	871.46	4'	1040 A		
SMH-2	867.75	4'	1040 A	6" N: 862.83	6" SE: 862.73

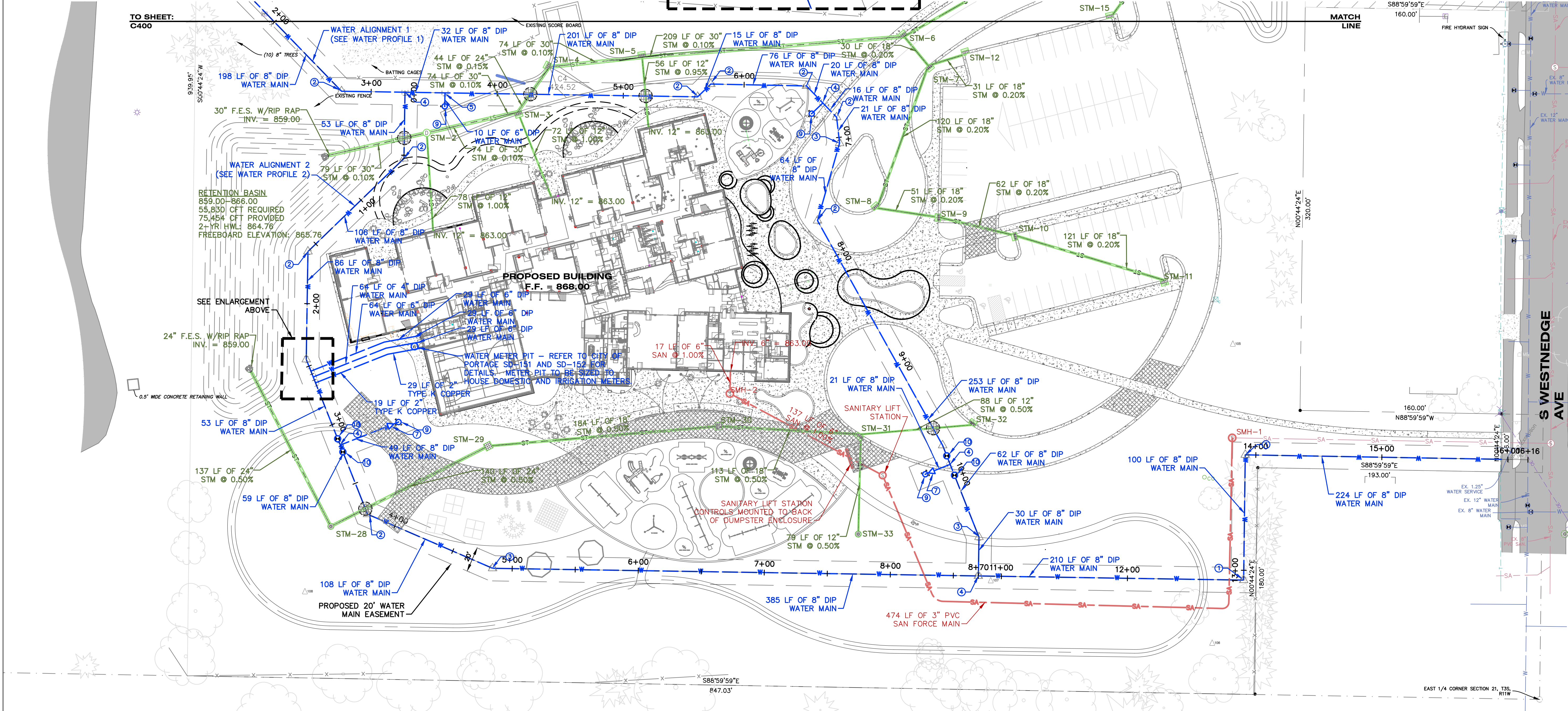
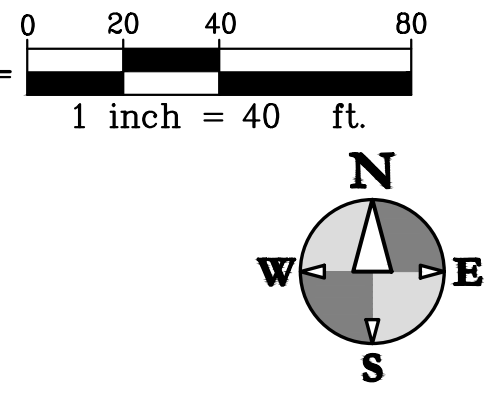
\* PLACE DOGHOUSE STRUCTURE OVER EXISTING SANITARY STUB TO EXISTING BUILDING (SEE DETAIL)

**NOTES**

- DEWATERING MAY BE REQUIRED TO INSTALL OR REMOVE SOME UTILITIES. REFER TO SPECIFICATIONS FOR SPECIFIC REQUIREMENTS. REFER TO GEOTECHNICAL REPORT FOR MORE INFORMATION.
- COORDINATE ALL UTILITY LOCATIONS AND ELEVATIONS WITH MECHANICAL DRAWINGS AND BUILDING CONTRACTOR PRIOR TO INSTALLATION.
- REMOVE SEDIMENT FROM ALL STRUCTURES ONCE PAVING IS COMPLETE AND REMOVE SILT SACKS.
- VERIFY NUMBER OF FITTINGS PRIOR TO ORDERING. TOTALS DO NOT INCLUDE VERTICAL DEFLECTIONS THAT MAY BE NEEDED.
- PROVIDE 18" WATER MAIN SEPARATION WHEN CROSSING OTHER UTILITIES. DEFLECT UNDER OTHER UTILITIES W/O USING FITTINGS WHENEVER POSSIBLE. SEE WATER MAIN PROFILE SHEET.
- SITE CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL UTILITIES TO 5' FROM BUILDING WALL.
- WATER MAIN AND SANITARY SEWER MATERIALS AND INSTALLATION SHALL COMPLY WITH CITY OF PORTAGE REQUIREMENTS.
- VERIFY LOCATION AND ELEVATION OF EXISTING SANITARY LEAD PRIOR TO ORDERING STRUCTURES AND CONSTRUCTION.
- SEE SITE ELECTRICAL PLAN FOR LOCATION OF ALL ELECTRICAL SLEEVES AND CONDUIT.
- CONTRACTOR MAY ELECT TO USE CASTING 7055M2 IN CURB AND GUTTER LOCATIONS. (SEE SCHEDULE AT RIGHT)

**LEGEND**

- DEFLECT WATER MAIN 18" UNDER PIPE CONFLICT (SEE DETAIL)
- NOTE: CONTRACTOR RESPONSIBLE FOR VERIFYING FITTINGS. AMOUNTS DO NOT TAKE INTO CONSIDERATION VERTICAL DEFLECTIONS.



ISSUED FOR \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
SITE UTILITY PLAN - SOUTH  
DATE  
DECEMBER 21, 2022  
SHEET NUMBER  
C 401  
21-237.11



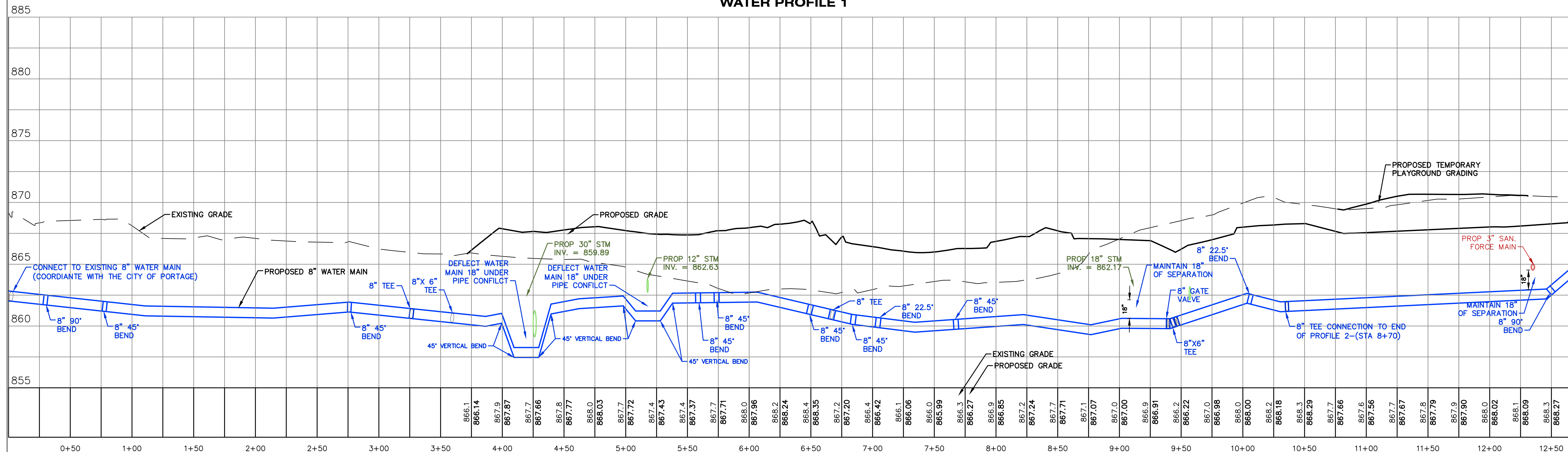
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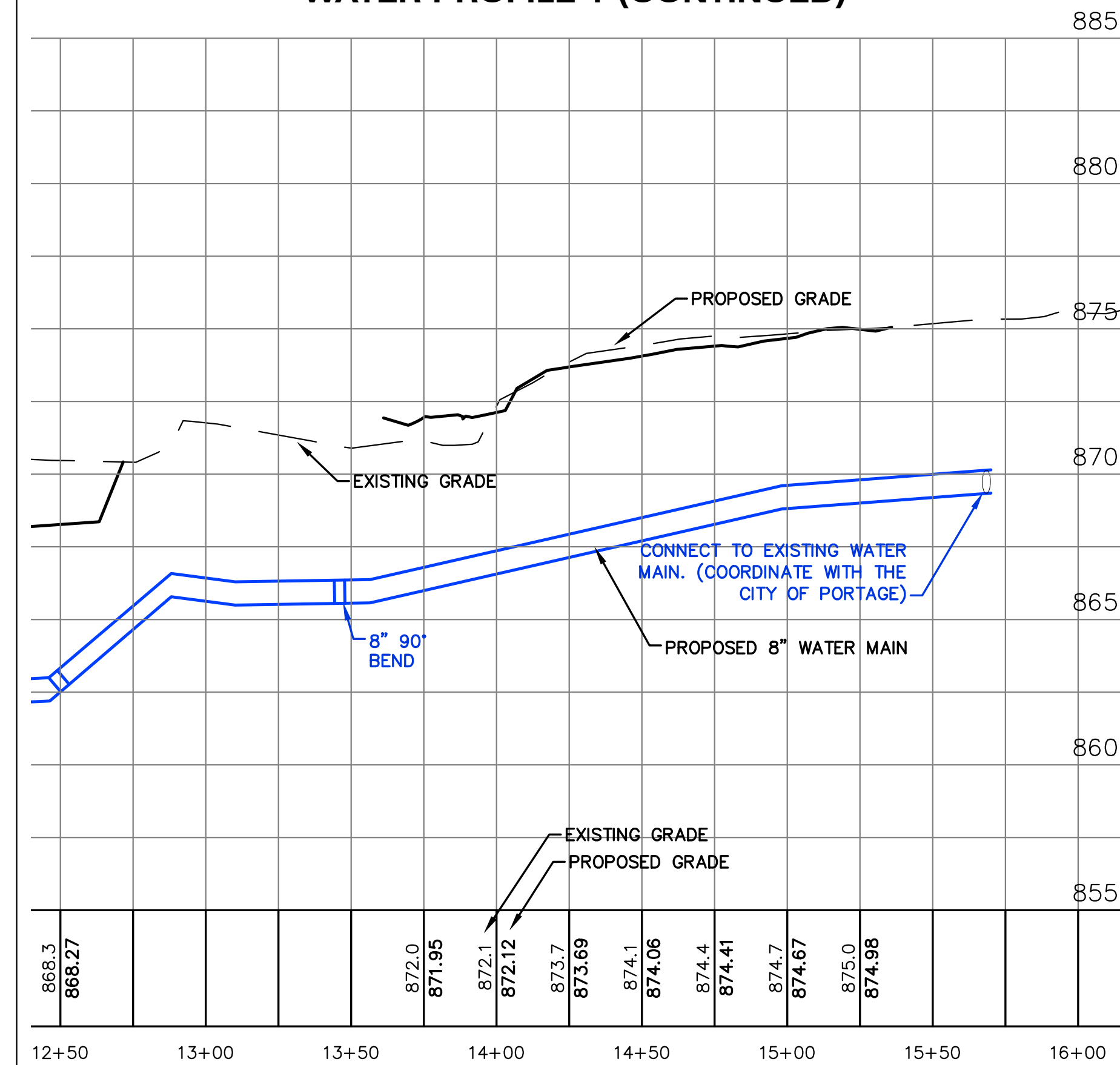
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FIELD WORK PERFORMED BY:  
DRIESENGA & ASSOCIATES, LLC

WATER PROFILE 1



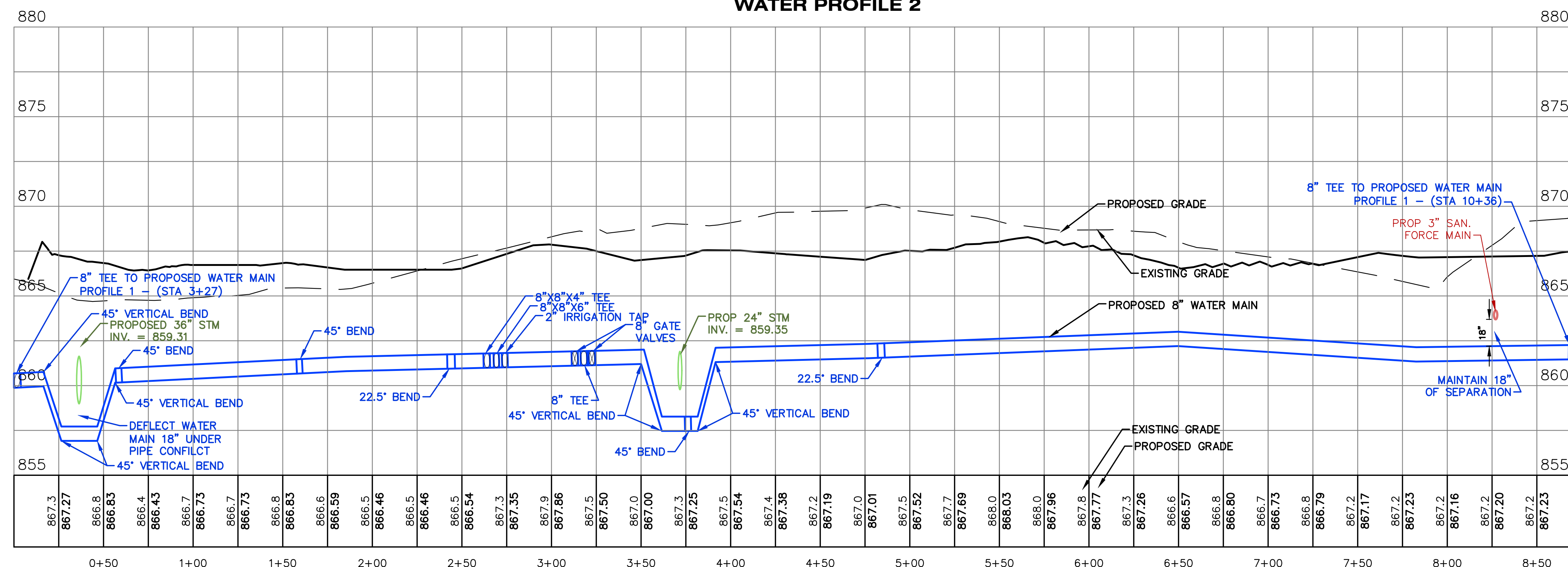
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'

WATER PROFILE 1 (CONTINUED)



HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'

WATER PROFILE 2



HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'

ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
WATER MAIN PROFILE

DATE  
DECEMBER 21, 2022  
SHEET NUMBER  
C 402  
21-237.11



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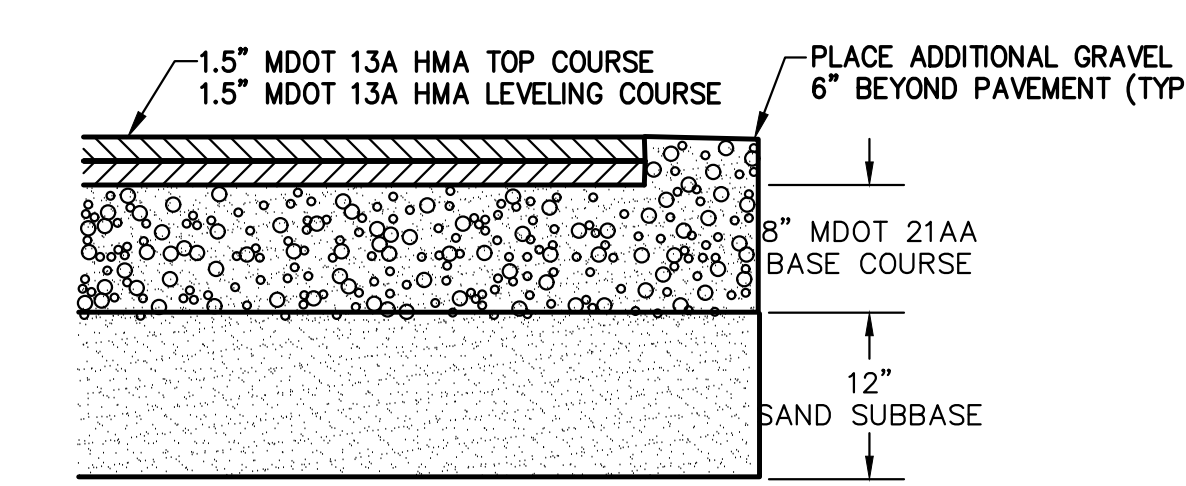


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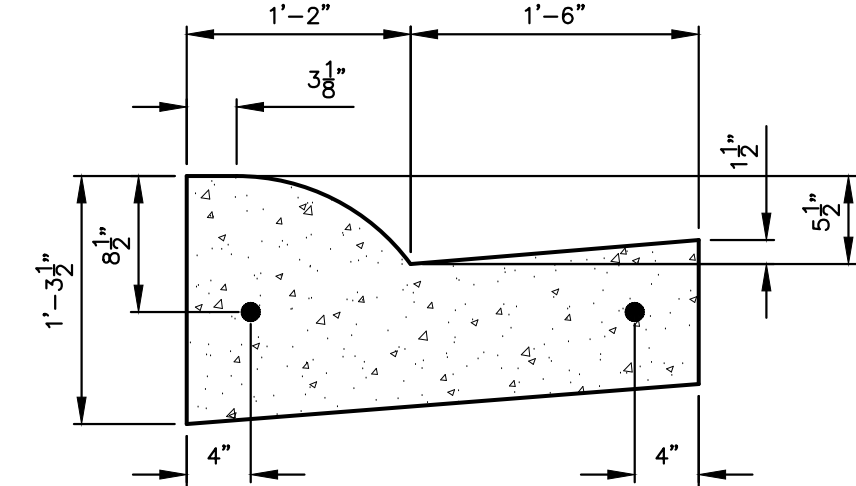
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**PAVEMENT NOTES:**

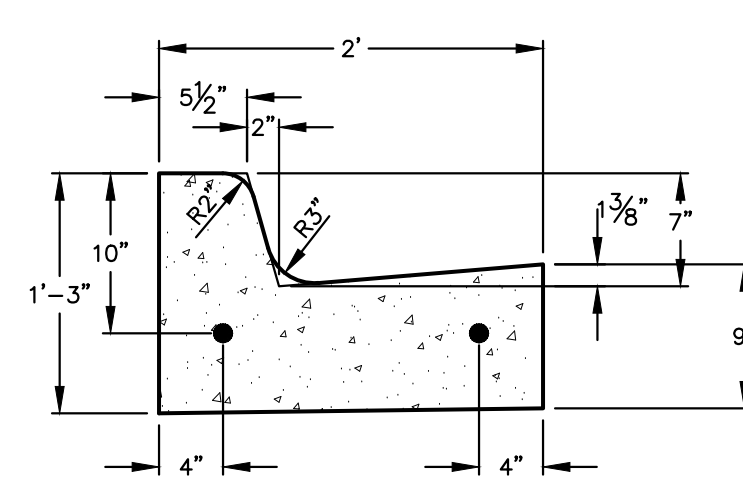
1. THE SUBGRADE MATERIALS SHALL BE PROOF ROLLED AND/OR SCARIFIED AND COMPACTED PRIOR TO PLACEMENT OF BASE MATERIAL. WHERE EXISTING SUBGRADE MATERIALS ARE UNSUITABLE, THEY SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT MATERIAL IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.
2. HEAVY DUTY CONCRETE PAVEMENT AND STANDARD DUTY CONCRETE PAVEMENT (AS RECOMMENDED BY THE GEOTECHNICAL REPORT) SHALL BE STEEL REINFORCED.
3. ALL JOINTS MUST BE SEALED WITH AN APPROVED SEALANT. STEEL REINFORCING SHALL BE USED AT JOINTS. REFER TO ACI 330R (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS) FOR JOINT DESIGN AND LAYOUT.
4. ALL PAVEMENT AND AGGREGATE MATERIALS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT, GEOTECHNICAL REPORT PORTAGE PS - CENTRAL ELEMENTARY PROJECT NO. 2250349.3A ISSUED 07/28/22



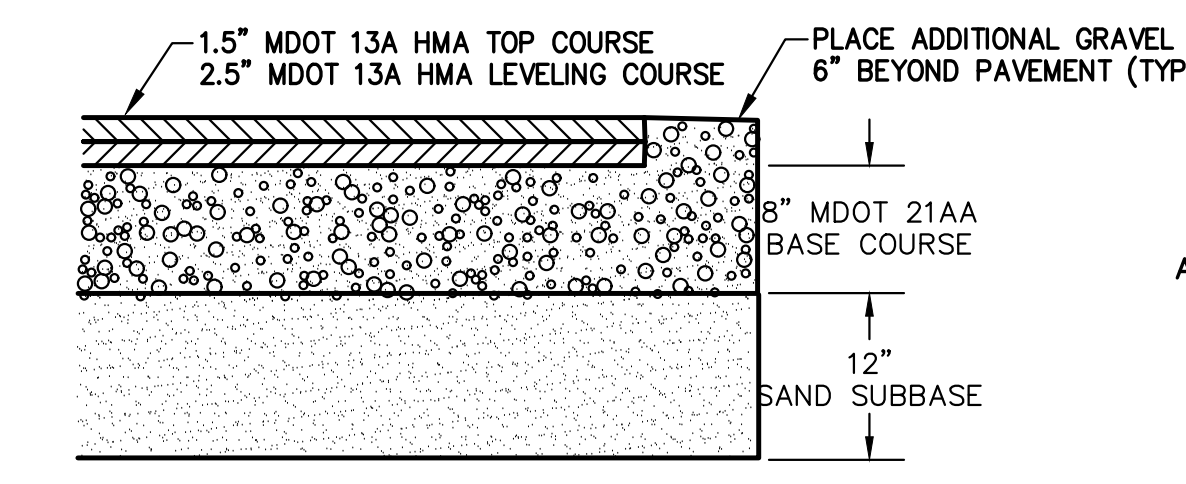
**LIGHT DUTY PAVEMENT SECTION**  
NOT TO SCALE



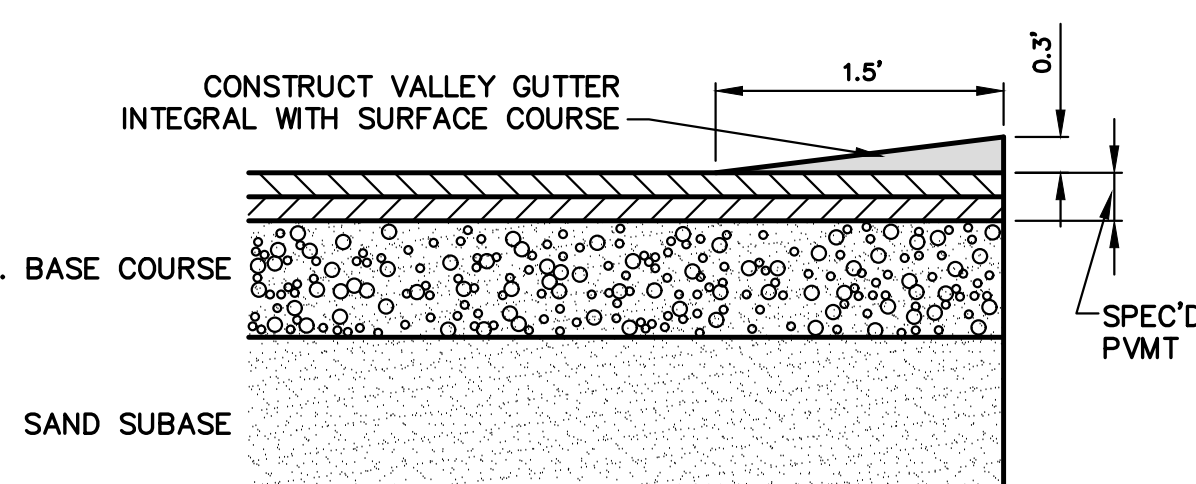
**"B2" CURB DETAIL**  
NOT TO SCALE



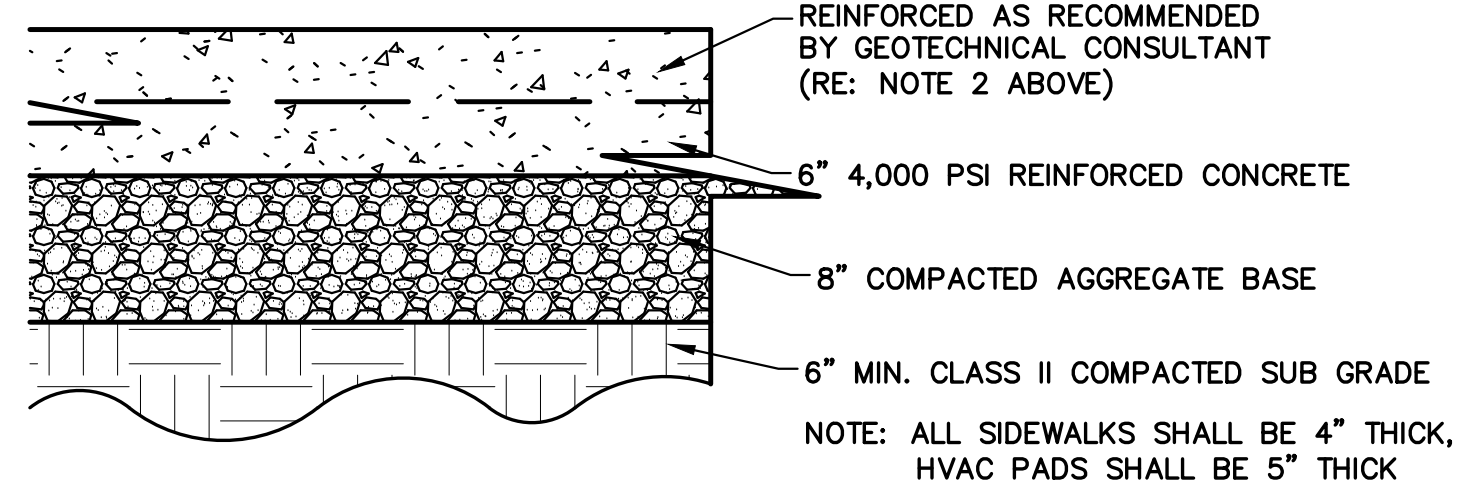
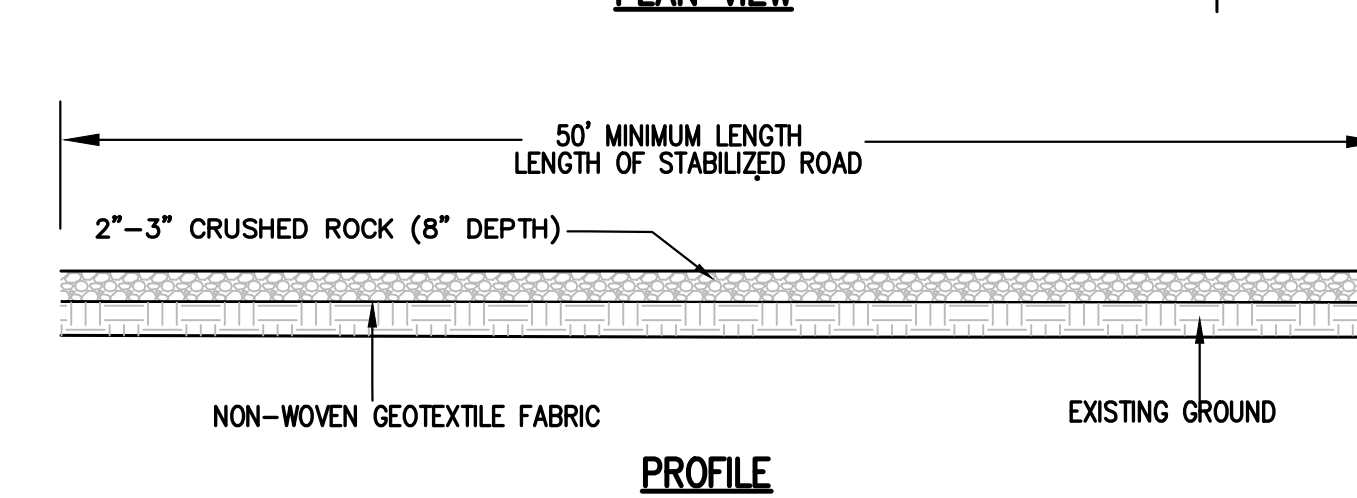
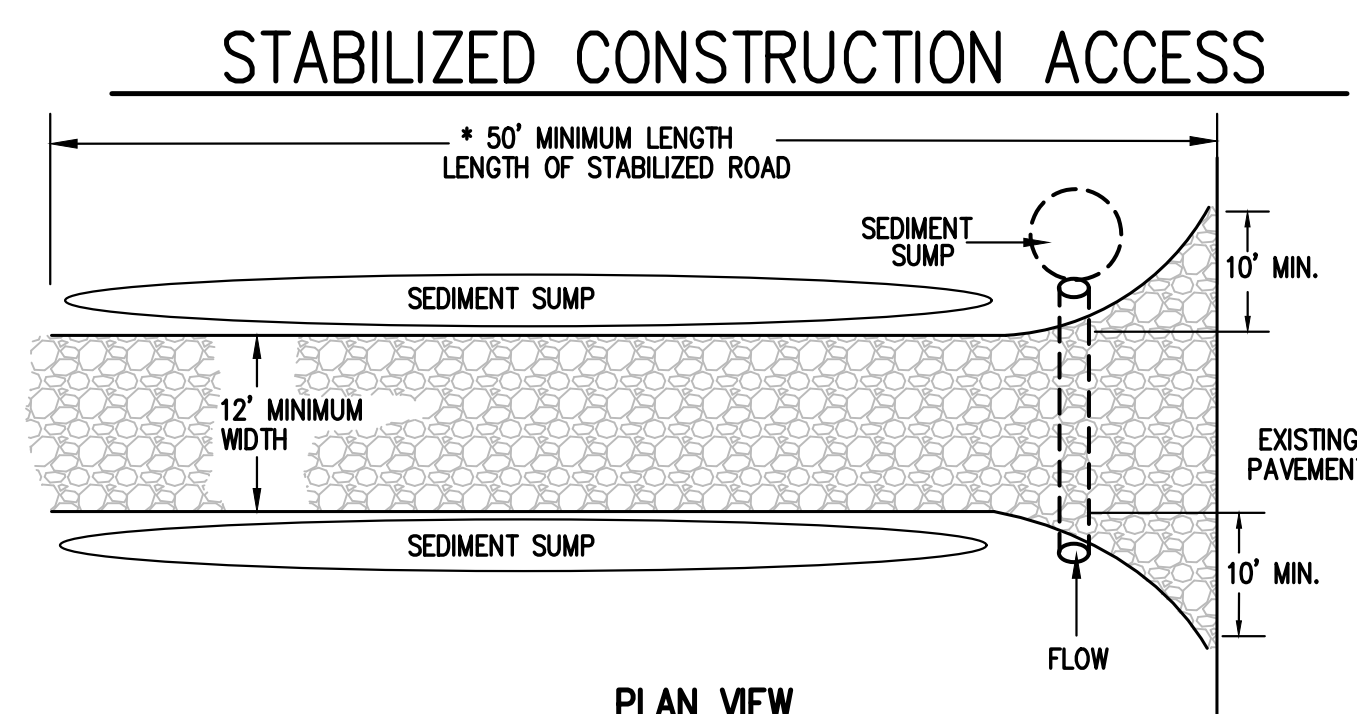
**"C4" CURB DETAIL**  
NOT TO SCALE



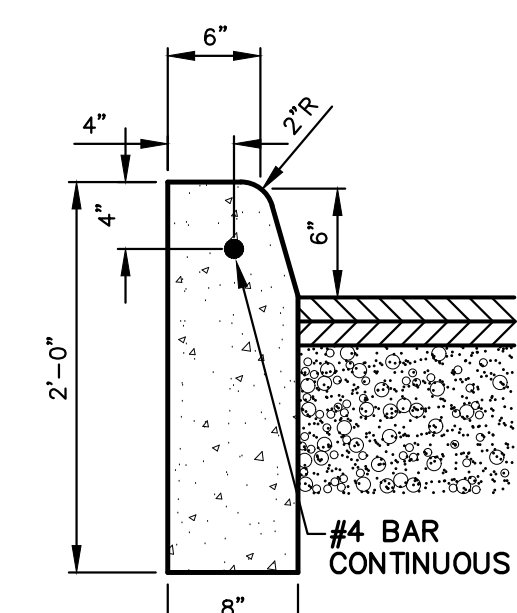
**HEAVY DUTY PAVEMENT SECTION**  
NOT TO SCALE



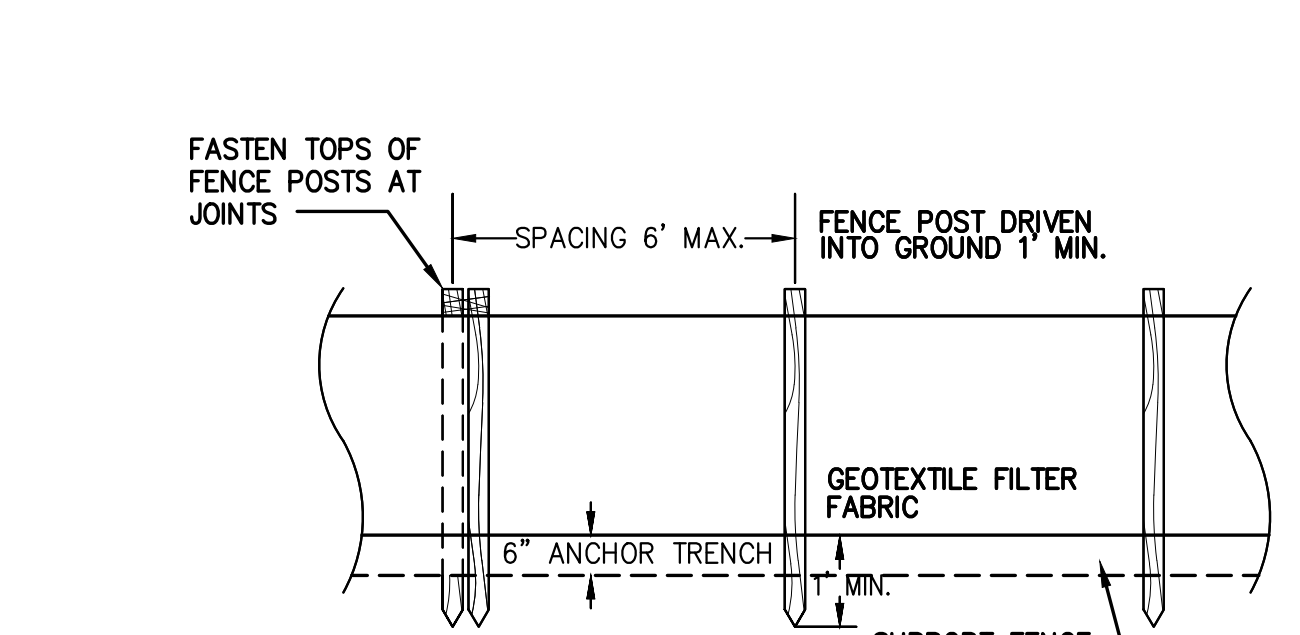
**BITUMINOUS VALLEY GUTTER**  
NOT TO SCALE



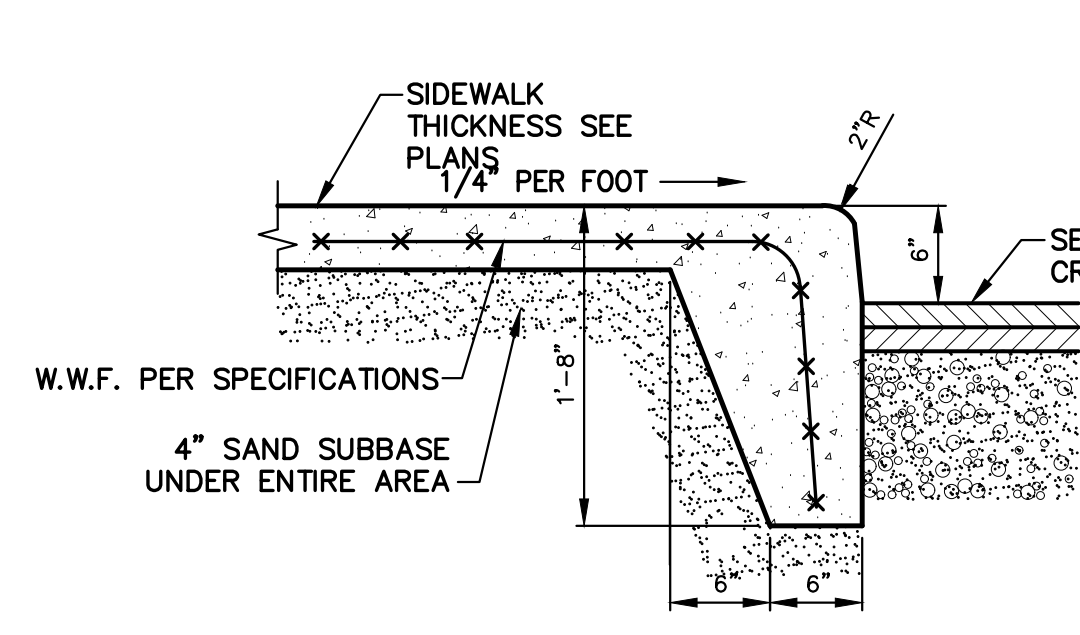
**HEAVY DUTY CONCRETE DETAIL**  
NOT TO SCALE



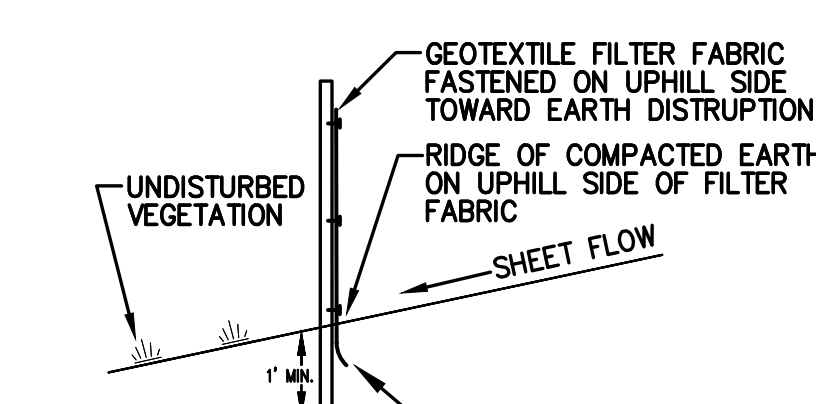
**"E2" CURB DETAIL**  
NOT TO SCALE



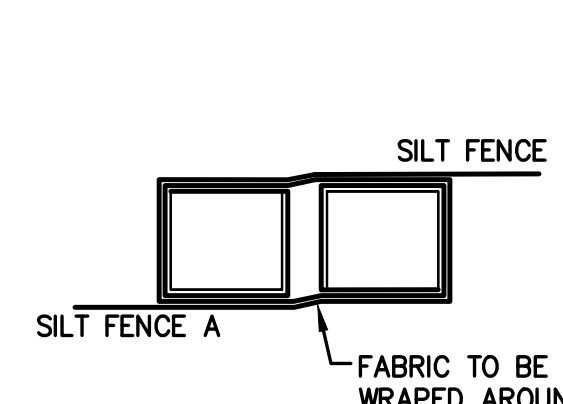
**FRONT VIEW**  
NOT TO SCALE



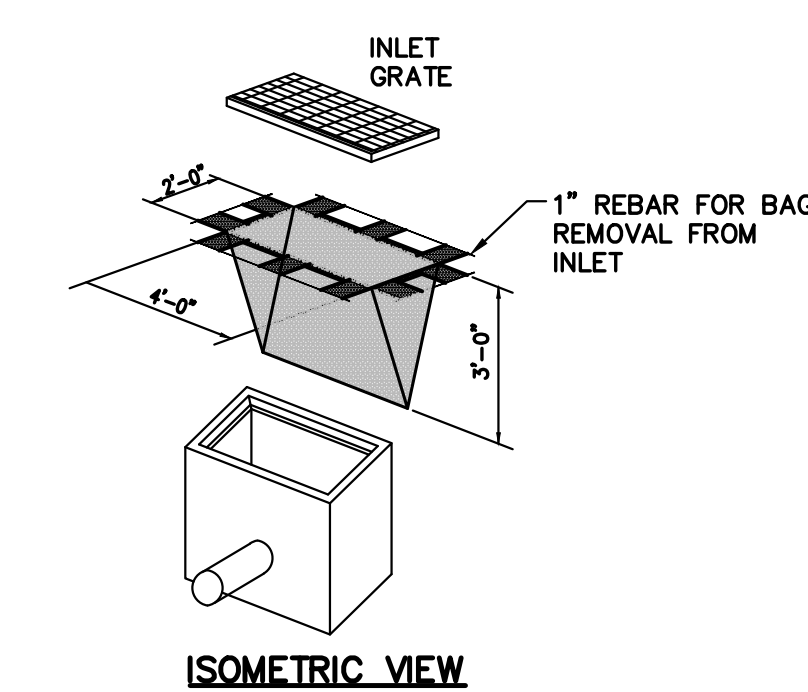
**INTEGRAL SIDEWALK/CURB**  
NOT TO SCALE



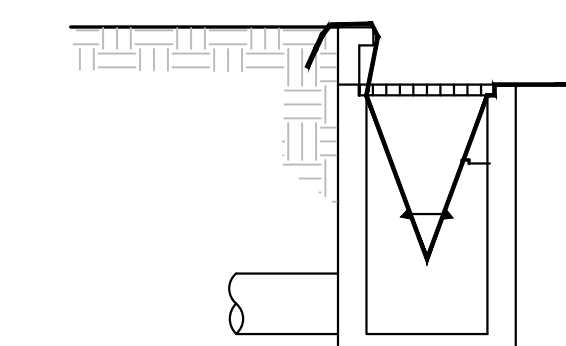
**SECTION**  
NOT TO SCALE



**JOINT DETAIL**  
NOT TO SCALE



**ISOMETRIC VIEW**



**INSTALLATION DETAIL**

ISSUED FOR DATE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
SITE DETAILS

DATE  
DECEMBER 21, 2022

SHEET NUMBER  
C-500  
21-237.11





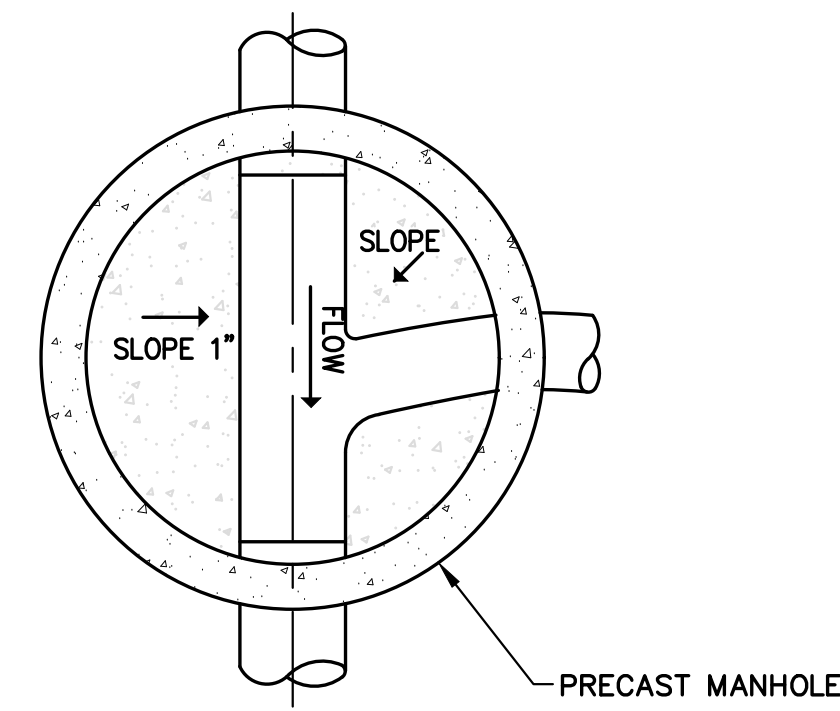
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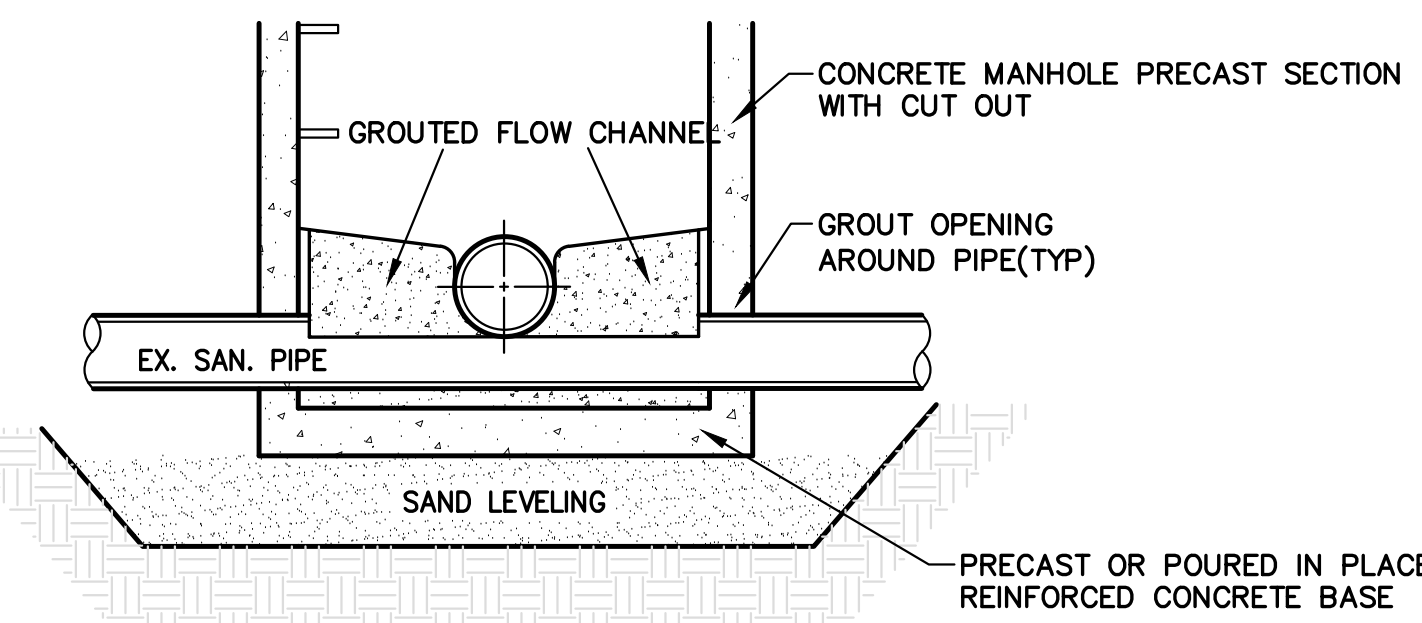
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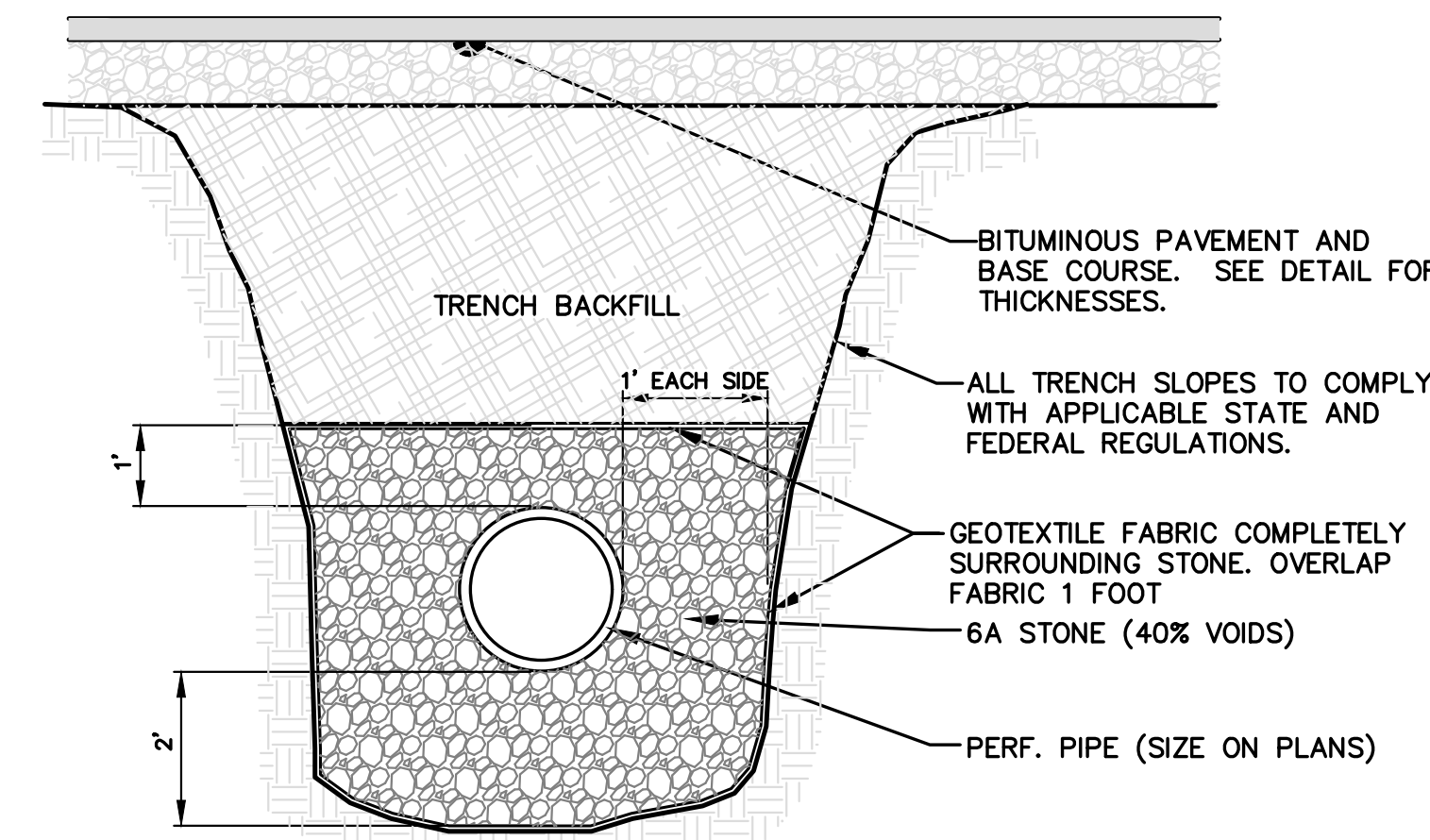
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PLAN VIEW



MH OVER EX. SANITARY SEWER

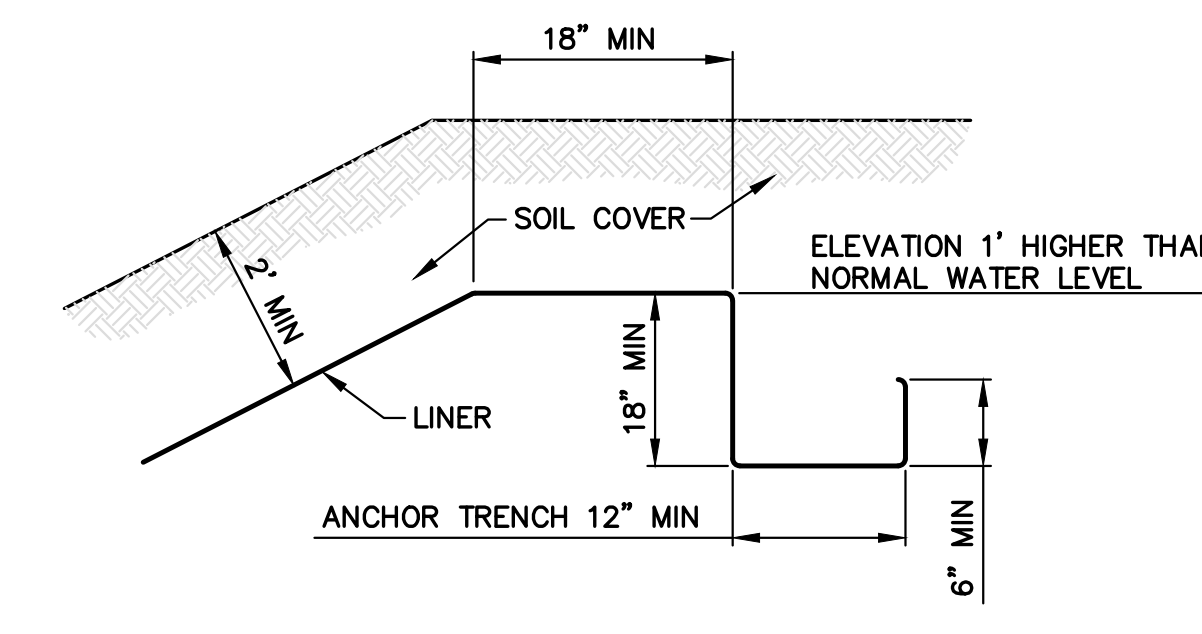


STONE TRENCH DETAIL

VOLUMES PROVIDED BELOW ASSUME 40% VOIDS IN STONE

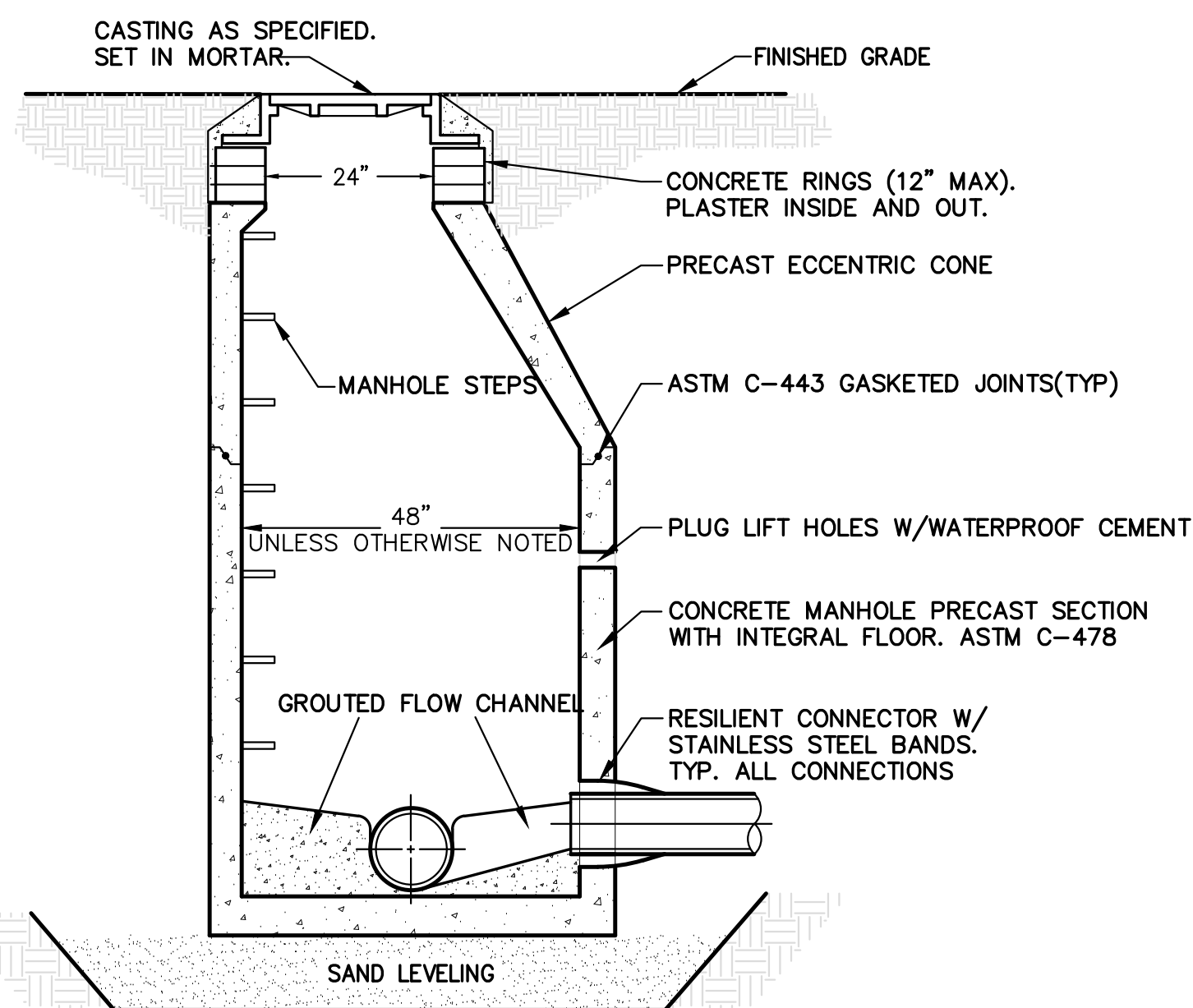
PIPE SIZE	VOLUME / FT
12"	5.27 CFT
18"	7.36 CFT
24"	9.87 CFT
36"	16.24 CFT

NO SCALE



LINER ANCHOR TRENCH DETAIL

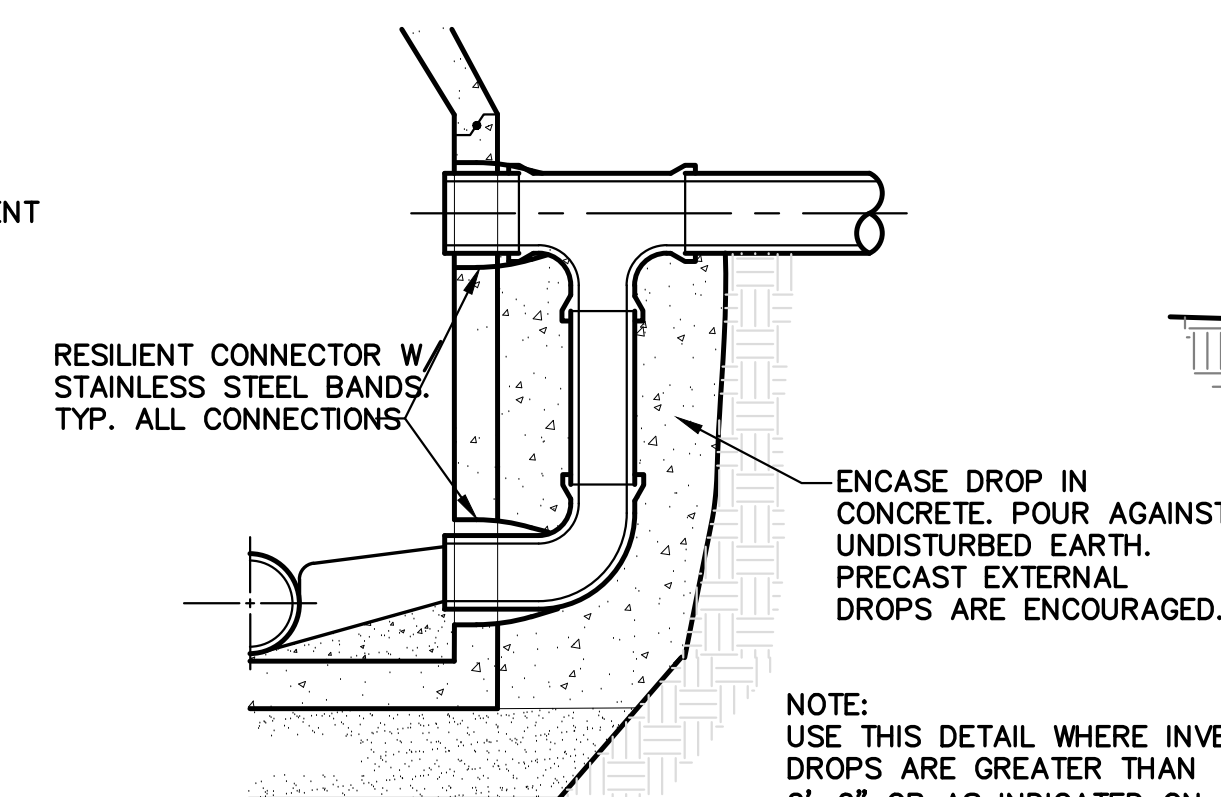
NOT TO SCALE



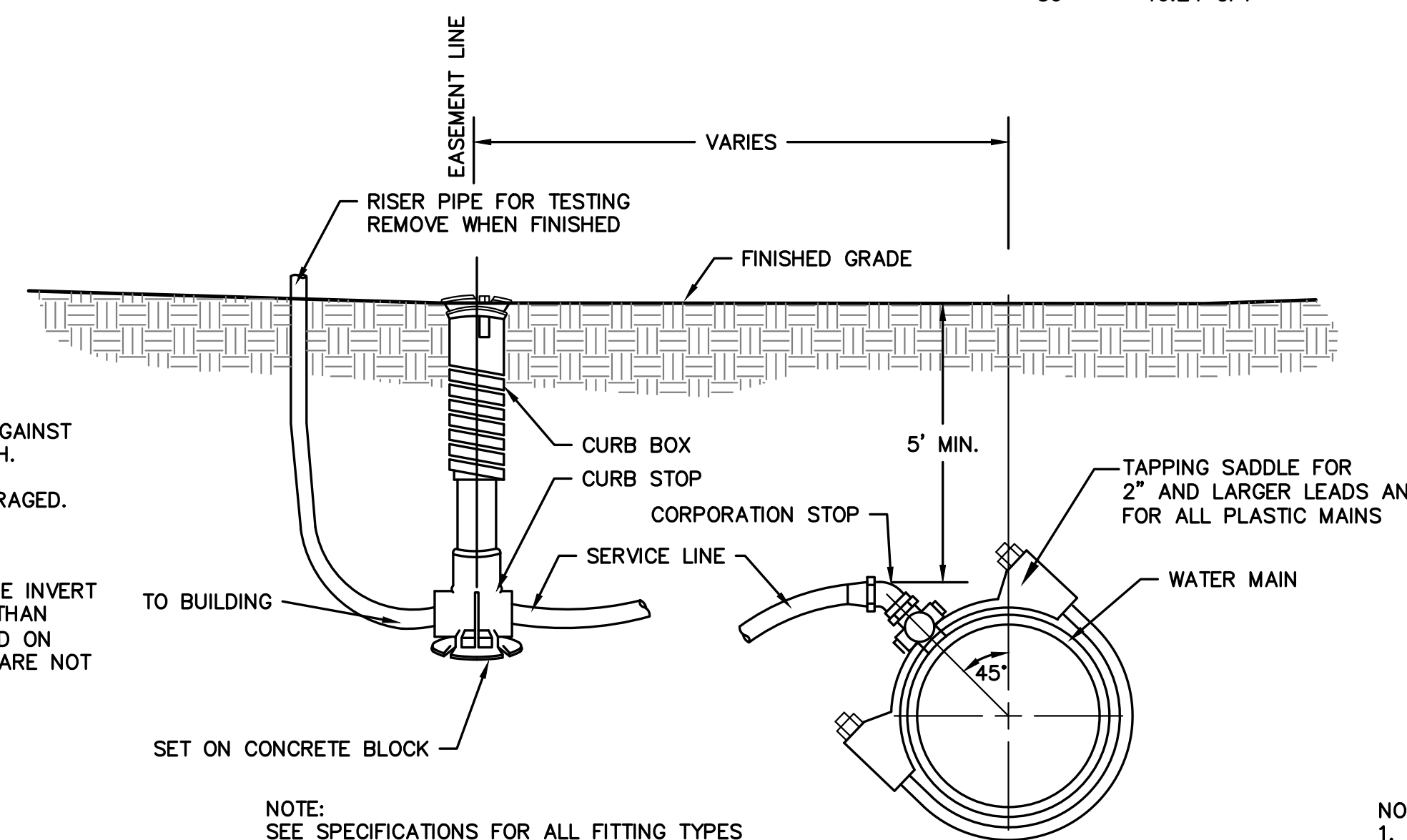
STANDARD MH SECTION

SANITARY MANHOLE DETAILS

NO SCALE

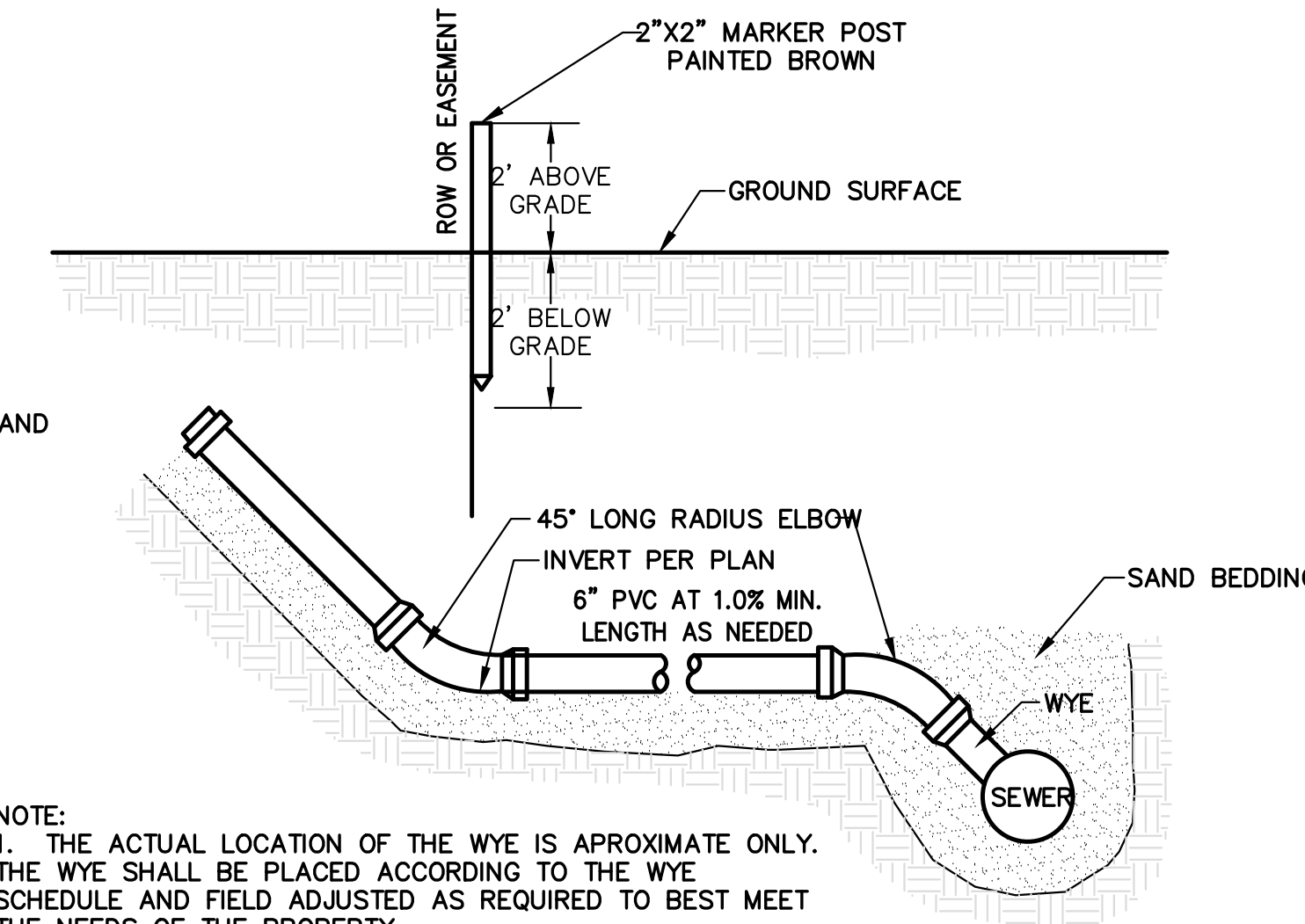


DROP MH SECTION



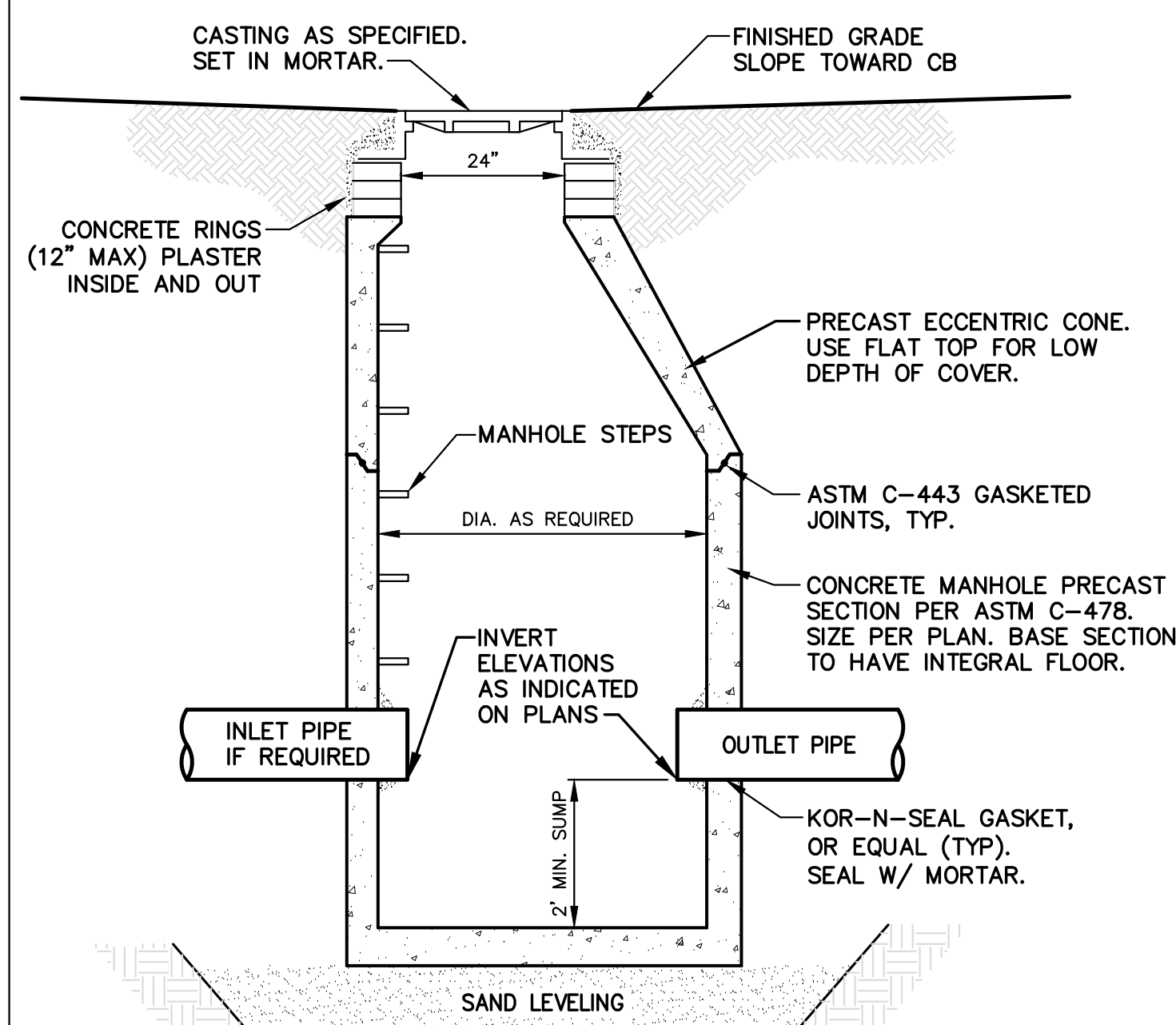
WATER SERVICE DETAIL

NO SCALE



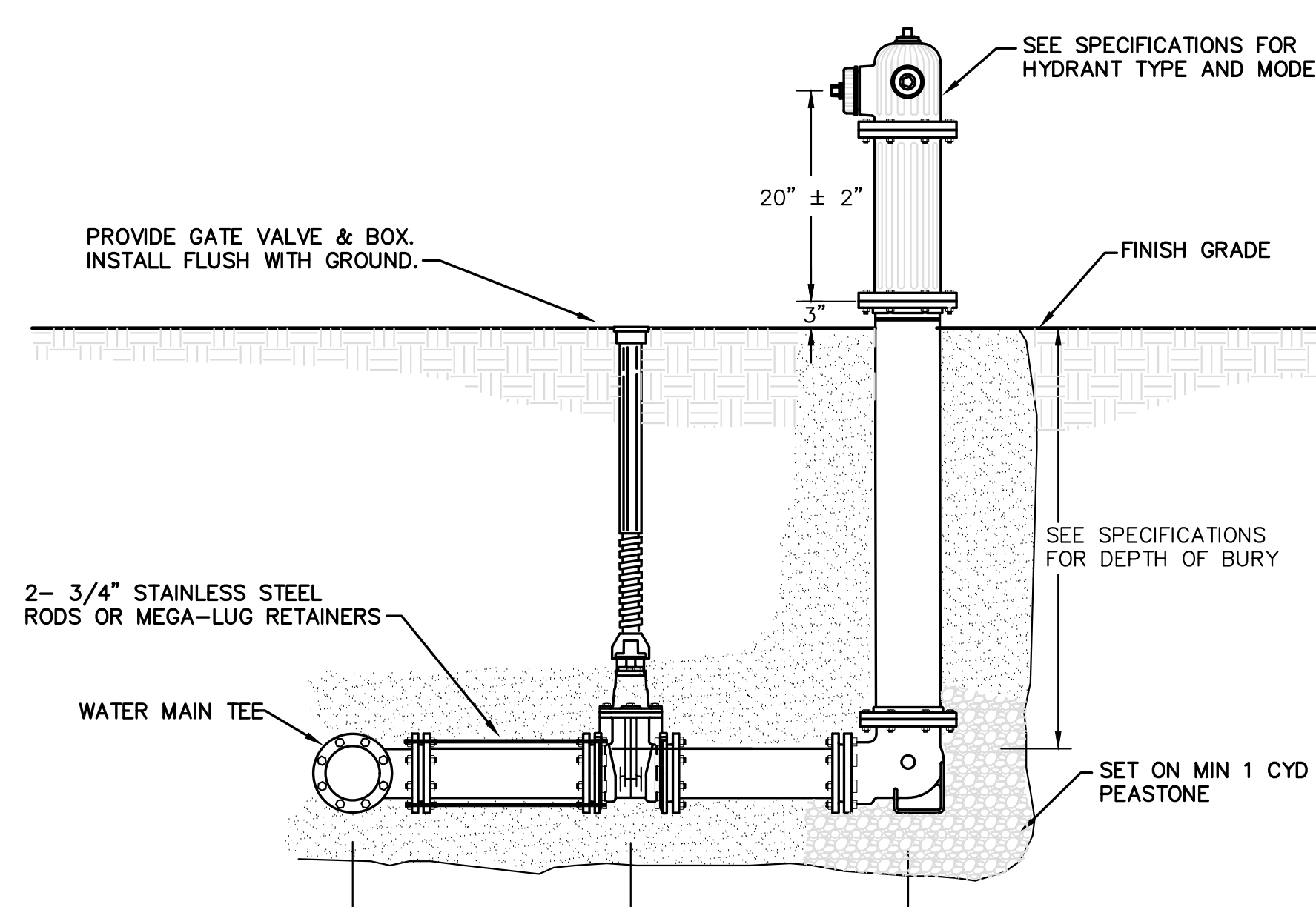
SANITARY LEAD DETAIL

NO SCALE



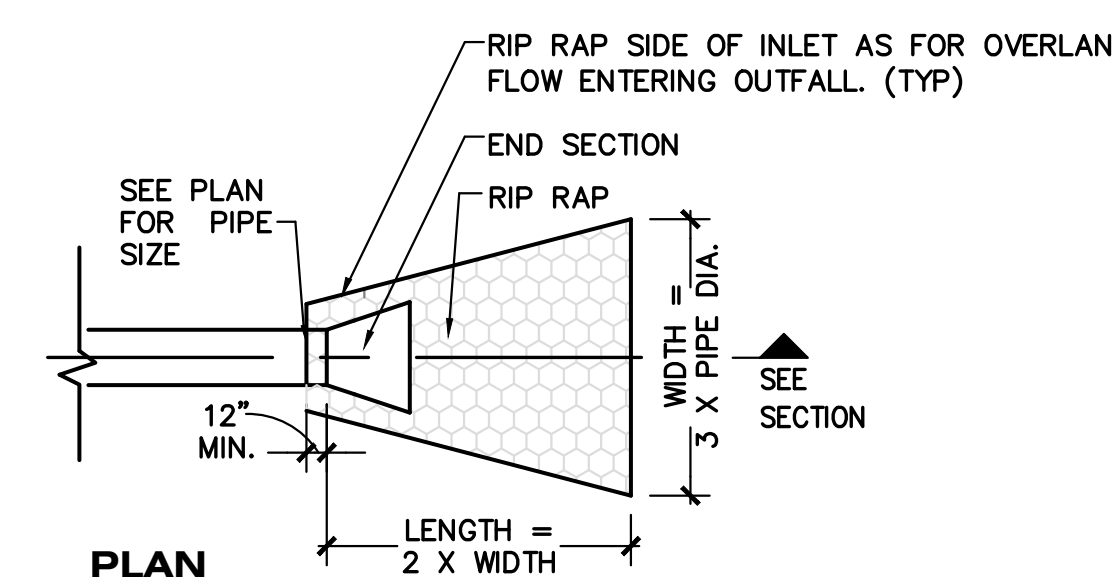
CATCH BASIN DETAIL

NO SCALE

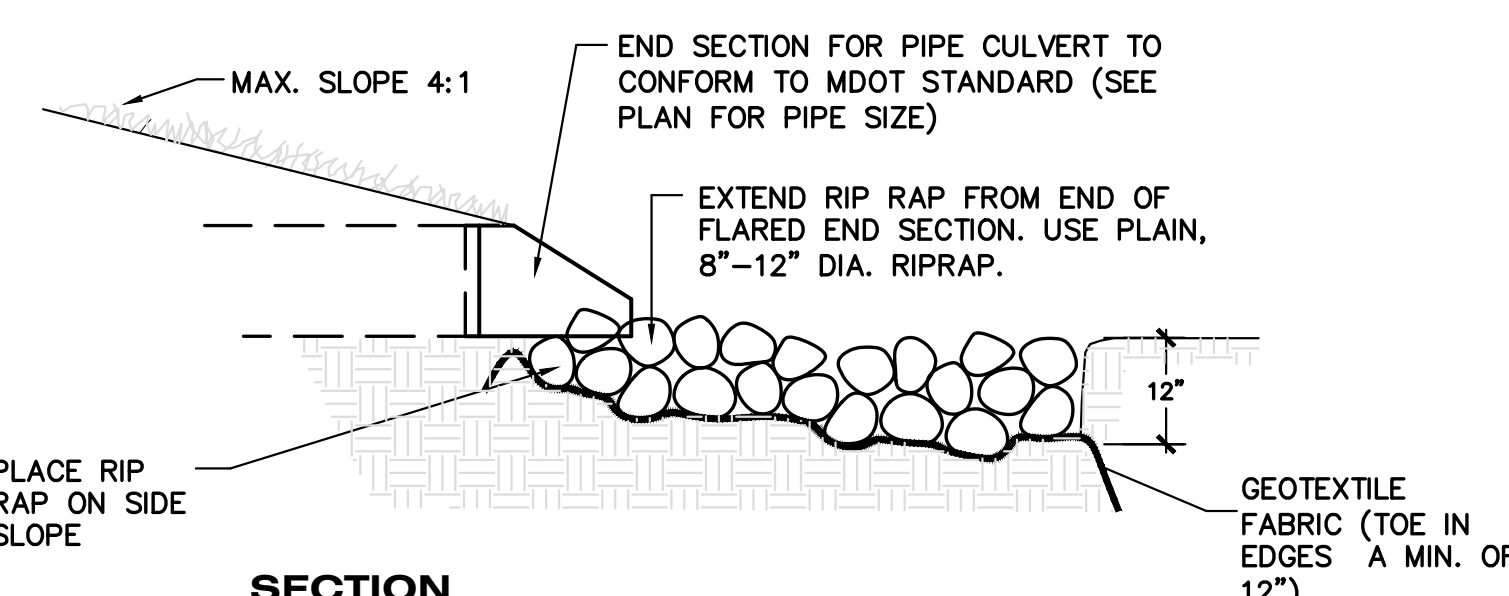


HYDRANT ASSEMBLY DETAIL

NO SCALE



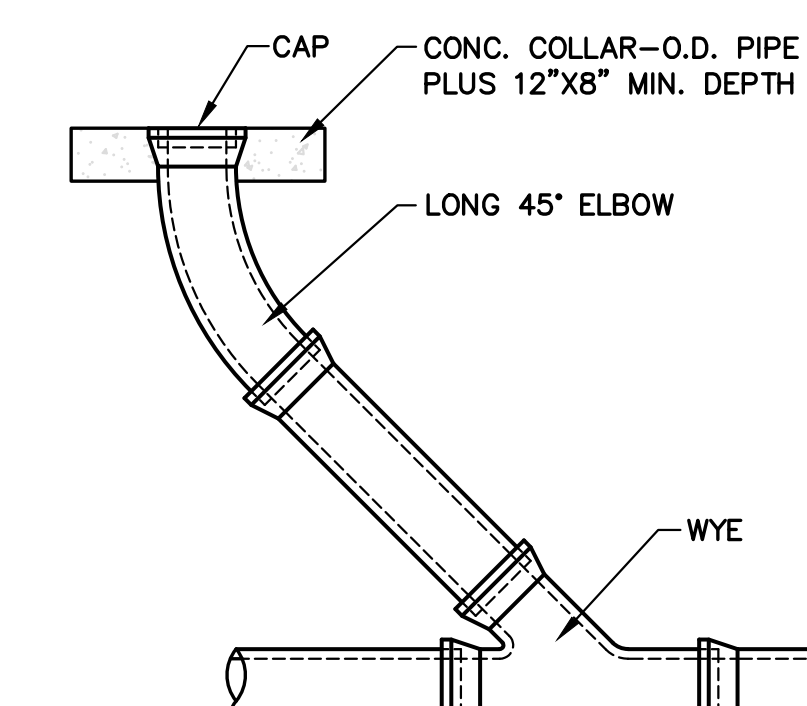
PLAN



SECTION

PIPE CULVERT WITH FLARED END SECTION DETAIL

NOT TO SCALE



SANITARY CLEANOUT DETAIL

NO SCALE

PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE  
UTILITY DETAILS

DATE  
DECEMBER 21, 2022

SHEET NUMBER  
C 501  
21-237.11



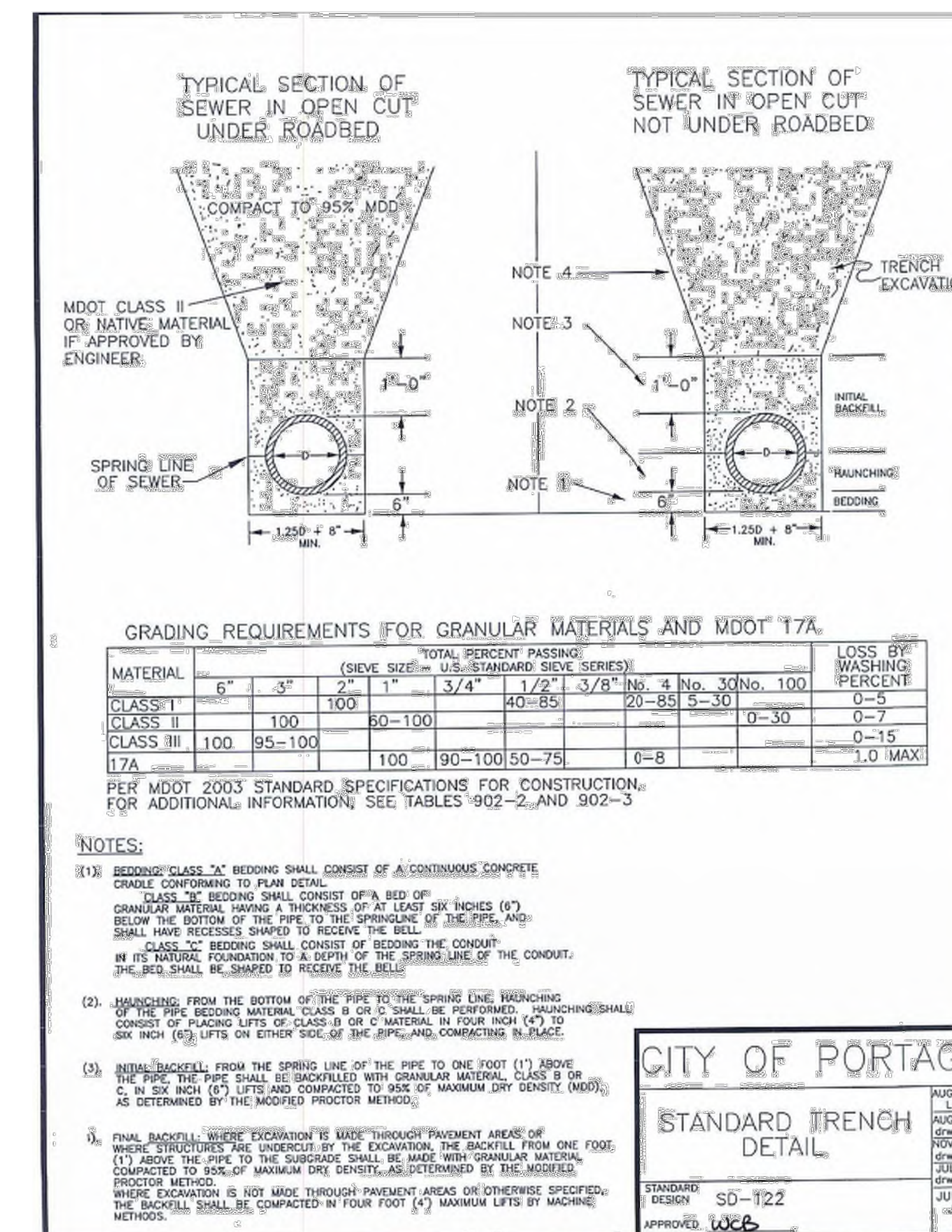
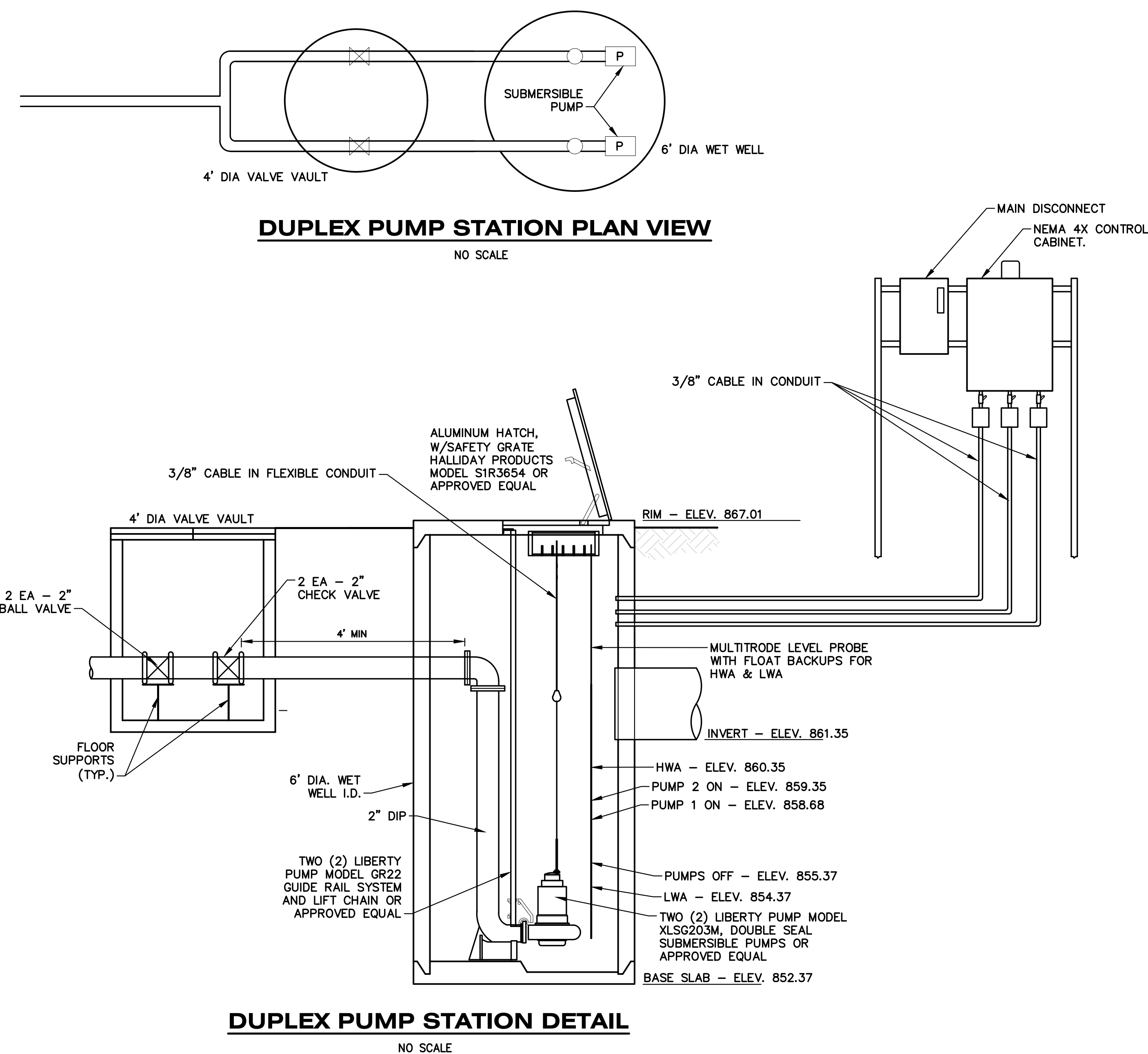
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ISSUED FOR DATE



PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
SANITARY DETAILS  
DATE  
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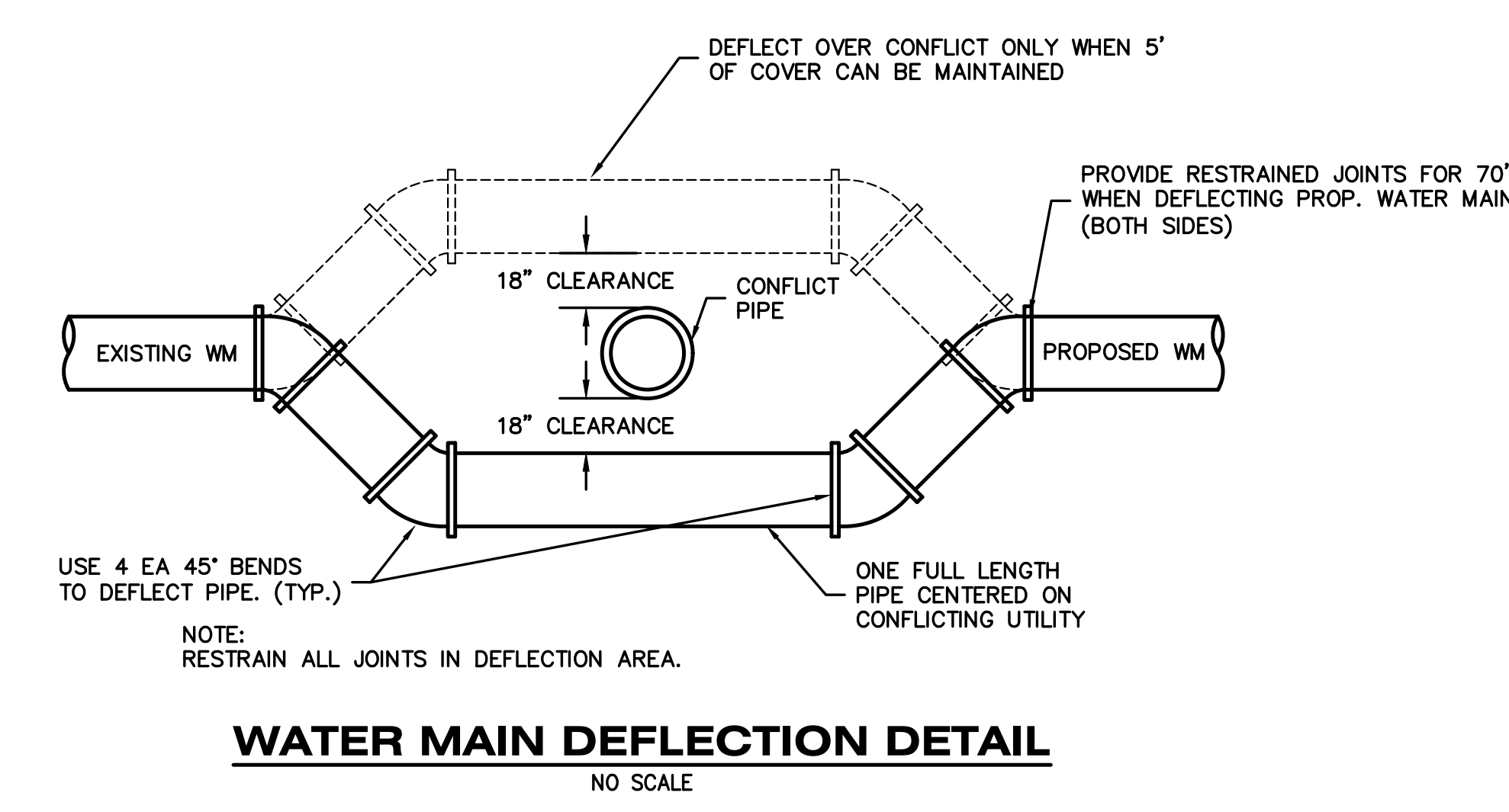
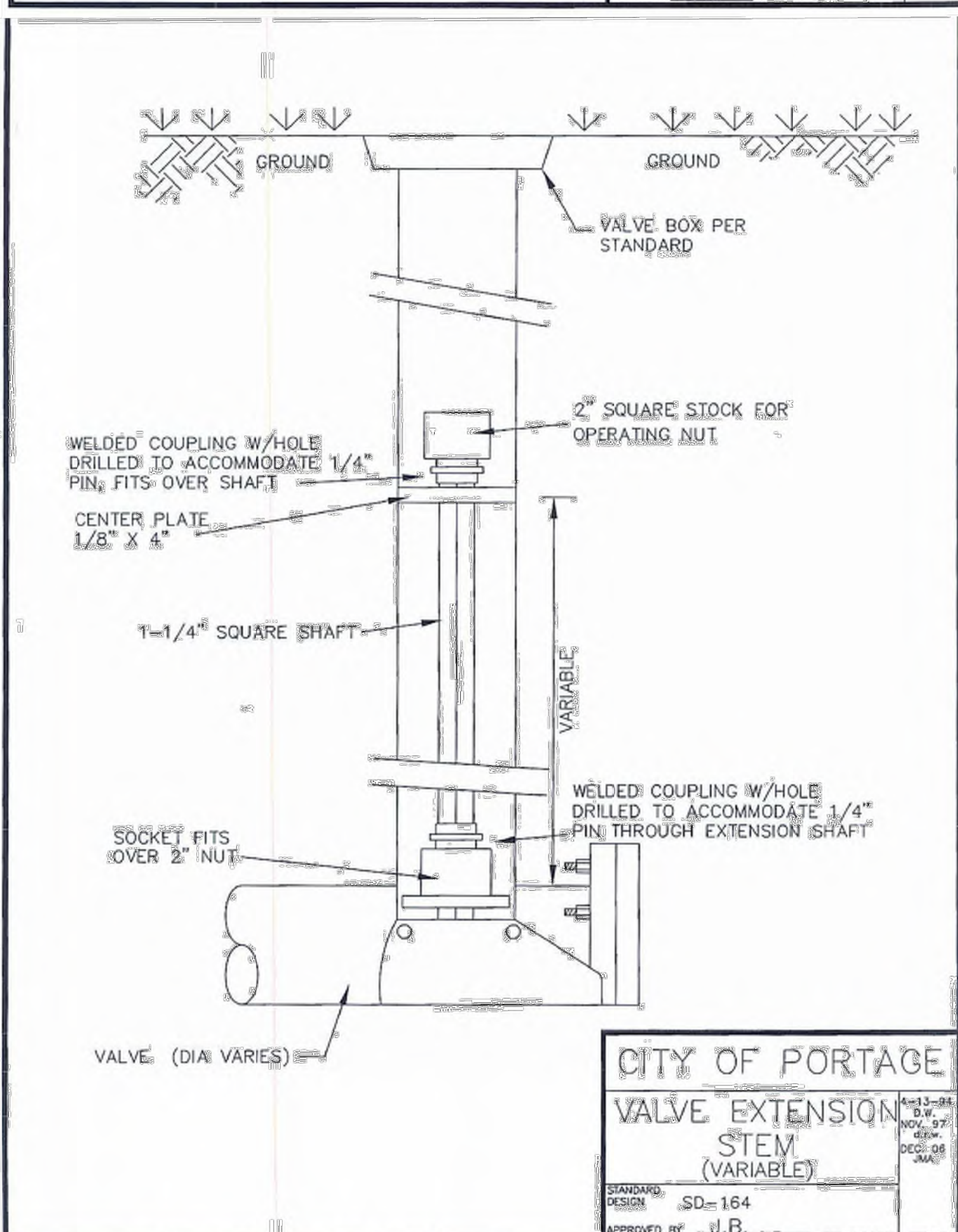
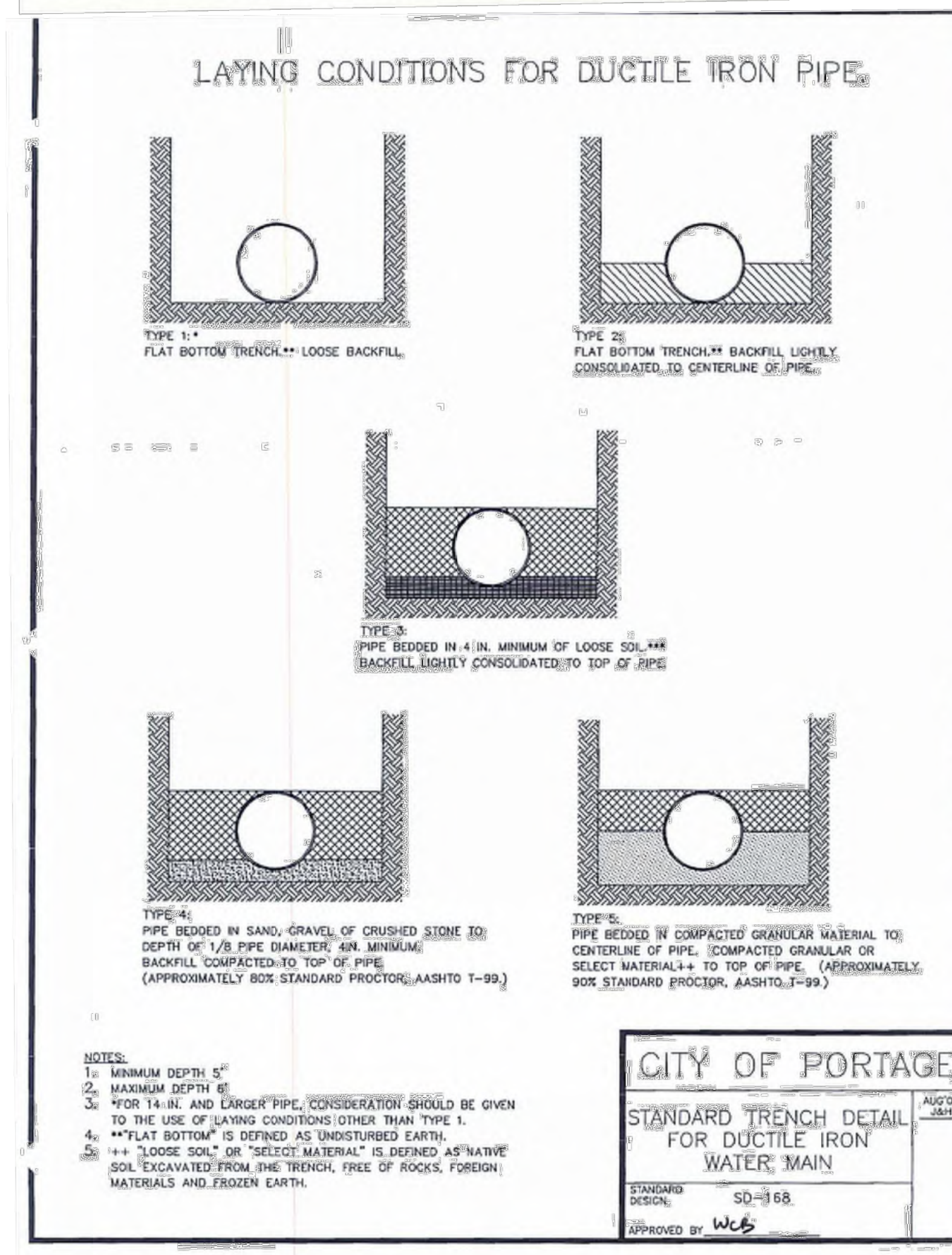
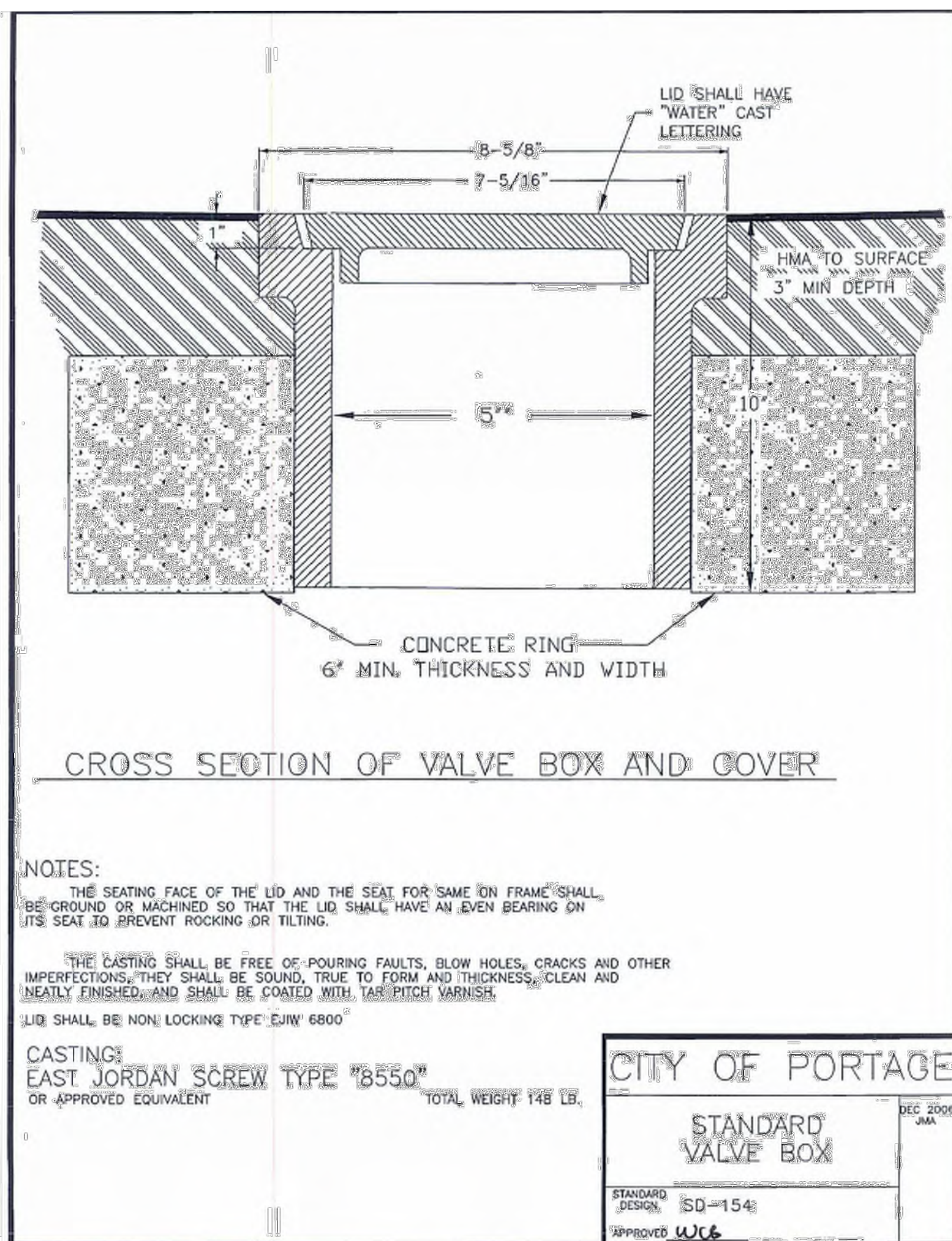
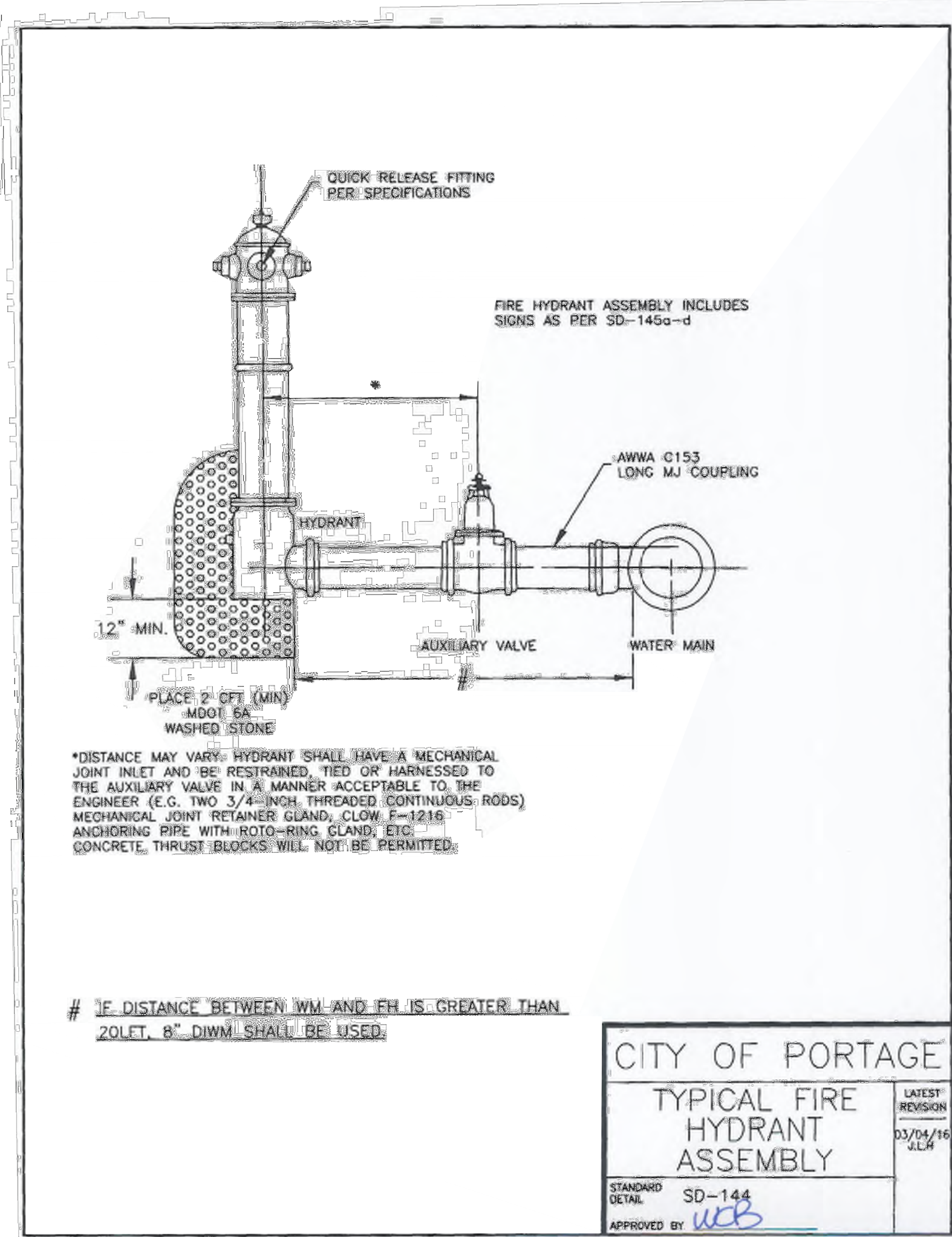
PROJECT TITLE  
BID PACKAGE 2:  
CENTRAL ELEMENTARY  
PLAYGROUND RELOCATION  
AND EARLY SITE PACKAGE

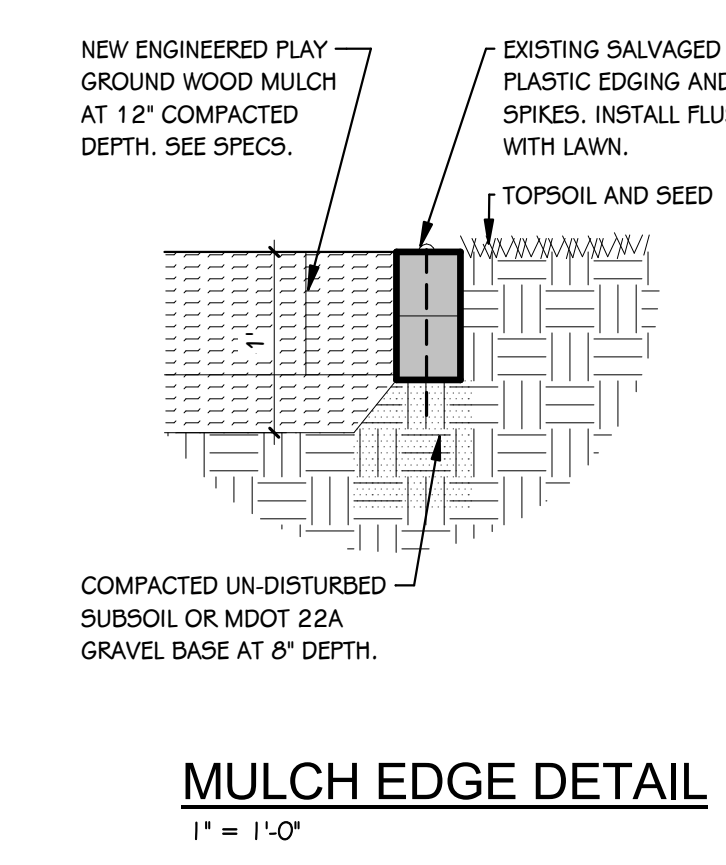
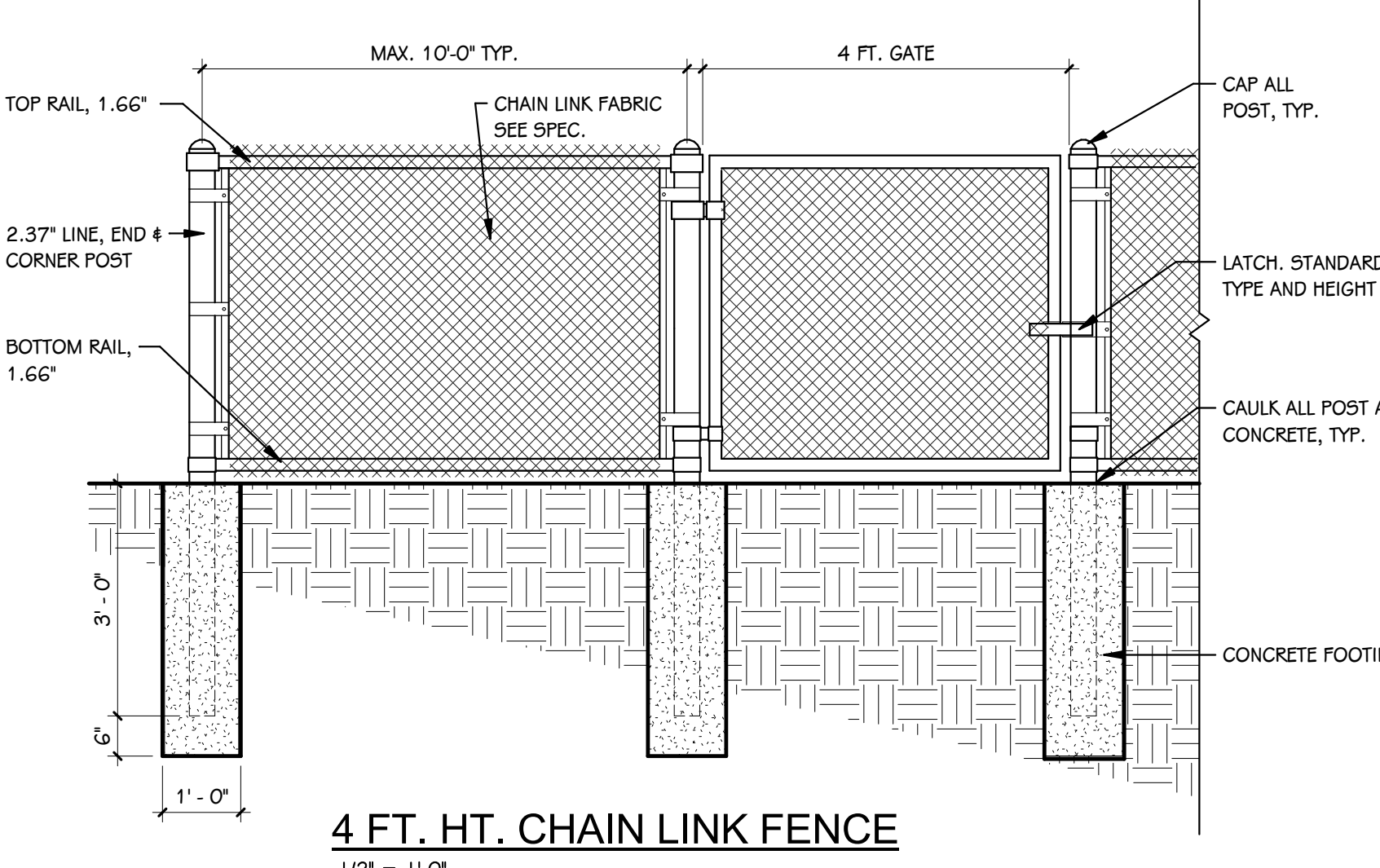
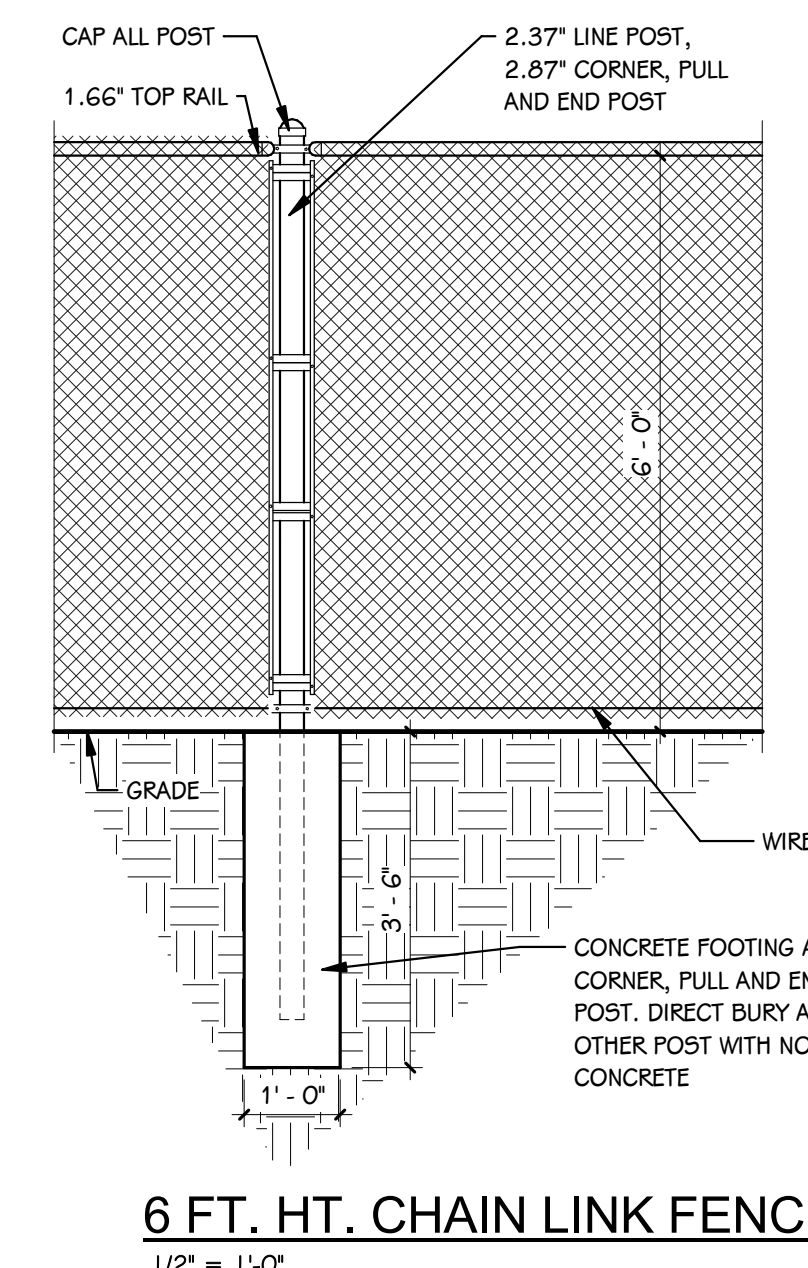
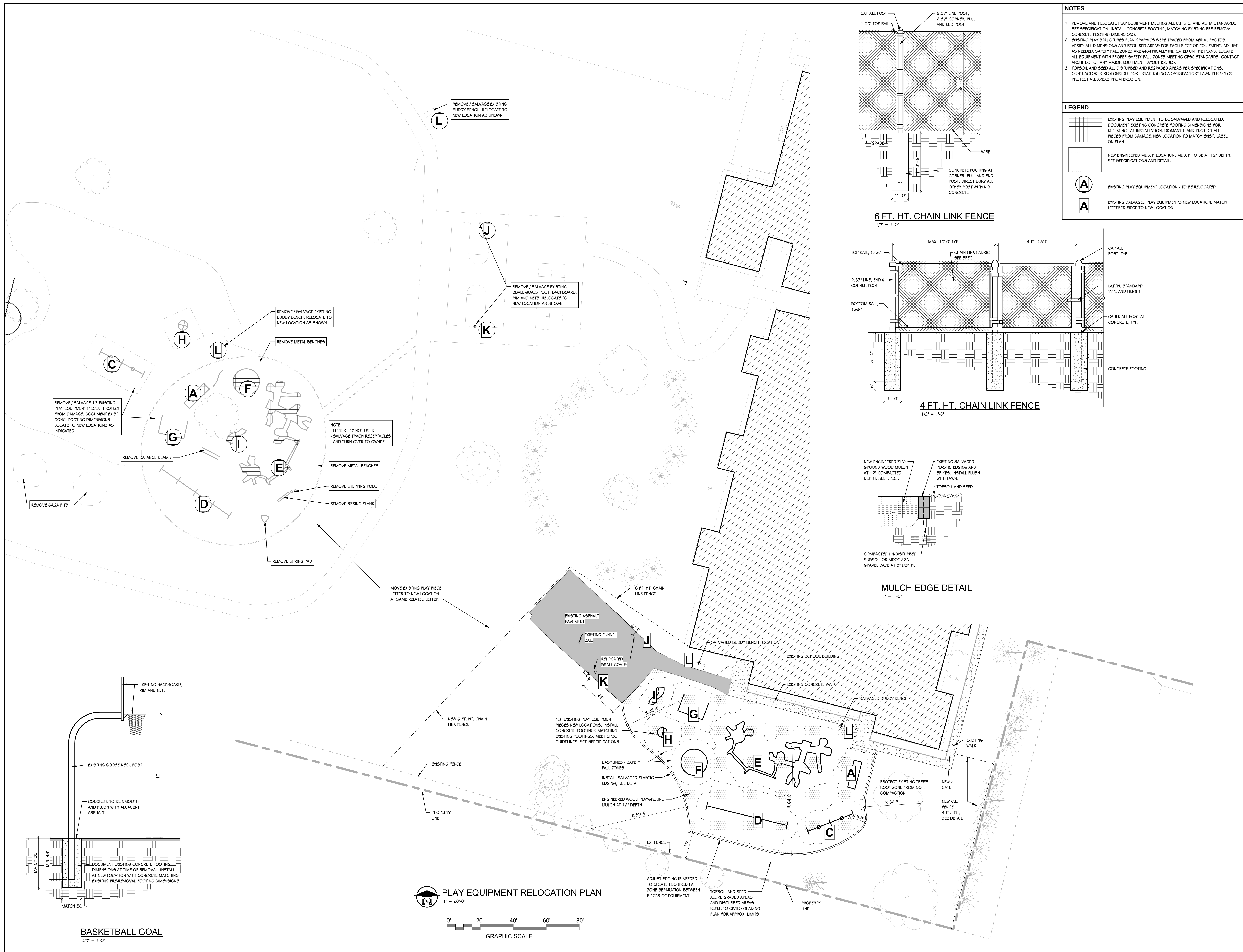
OWNER  
PORTAGE PUBLIC SCHOOLS  
Portage, Michigan

SHEET TITLE  
WATER DETAILS

SHEET NUMBER  
C 503  
21-237.11

DATE  
DECEMBER 21, 2022





NOTES	
1.	REMOVE AND RELOCATE PLAY EQUIPMENT MEETING ALL C.P.S.C. AND ASTM STANDARDS. SEE SPECIFICATION. INSTALL CONCRETE FOOTING, MATCHING EXISTING PRE-REMOVAL CONCRETE FOOTING DIMENSIONS.
2.	EXISTING PLAY STRUCTURES PLAN GRAPHICS WERE TRACED FROM AERIAL PHOTOS. VERIFY ALL DIMENSIONS AND REQUIRED AREAS FOR EACH PIECE OF EQUIPMENT. ADJUST AS NEEDED. SAFETY FALL ZONES ARE GRAPHICALLY INDICATED ON THE PLANS. LOCATE ALL EQUIPMENT WITH PROPER SAFETY FALL ZONES MEETING CPSC STANDARDS. CONTACT ARCHITECT OF ANY MAJOR EQUIPMENT LAYOUT ISSUES.
3.	TOPSOIL AND SEED ALL DISTURBED AND REGRADED AREAS PER SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A SATISFACTORY LAWN PER SPECS. PROTECT ALL AREAS FROM EROSION.

LEGEND	
	EXISTING PLAY EQUIPMENT TO BE SALVAGED AND RELOCATED. DOCUMENT EXISTING CONCRETE FOOTING DIMENSIONS FOR REFERENCE AT INSTALLATION. DISMANTLE AND PROTECT ALL PIECES FROM DAMAGE. NEW LOCATION TO MATCH EXIST. LABEL ON PLAN
	NEW ENGINEERED MULCH LOCATION. MULCH TO BE AT 12" DEPTH. SEE SPECIFICATIONS AND DETAIL.
	EXISTING PLAY EQUIPMENT LOCATION - TO BE RELOCATED
	EXISTING SALVAGED PLAY EQUIPMENT'S NEW LOCATION. MATCH LETTERED PIECE TO NEW LOCATION

