KWIK TRIP STORE #970

ENGINEERING PLANS

CITY OF WAUKESHA
WAUKESHA COUNTY, WISCONSIN

CITY OF WAUKESHA NOTE:

ALL SITE IMPROVEMENTS AND CONSTRUCTION SHOWN ON THE PLANS SHALL CONFORM TO THE CITY OF WAUKESHA DEVELOPMENT HANDBOOK & INFRASTRUCTURE SPECIFICATIONS, WHERE THE PLANS DO NOT COMPLY, IT SHALL BE THE SOLE RESPONSIBILITY AND EXPENSE OF THE DEVELOPER TO MAKE REVISION TO THE PLANS AN/OR CONSTRUCTED INFRASTRUCTURE TO COMPLY.

OWNER
KWIK TRIP, INC.
BRADFORD FRY, P.E.
1626 OAK STREET
LA CROSSE, WI 54602
PHONE: 608-793-6414
EMAIL: BFry@kwiktrip.com

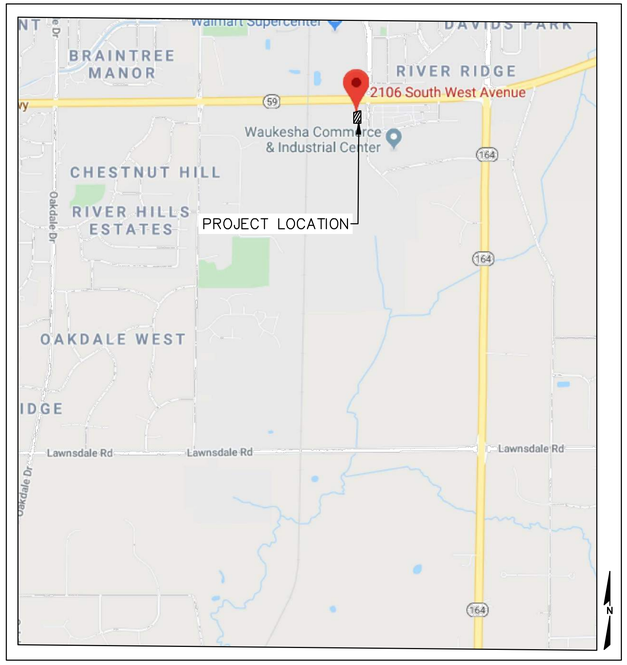
CIVIL/SITE ENGINEER
raSmith
PM: ROBERT J. HARLEY, P.E.
EMAIL: Robert.Harley@rasmith.com

PE: CHRISTOPHER B. WHITE, P.E.
EMAIL: Christopher.White@rasmith.com

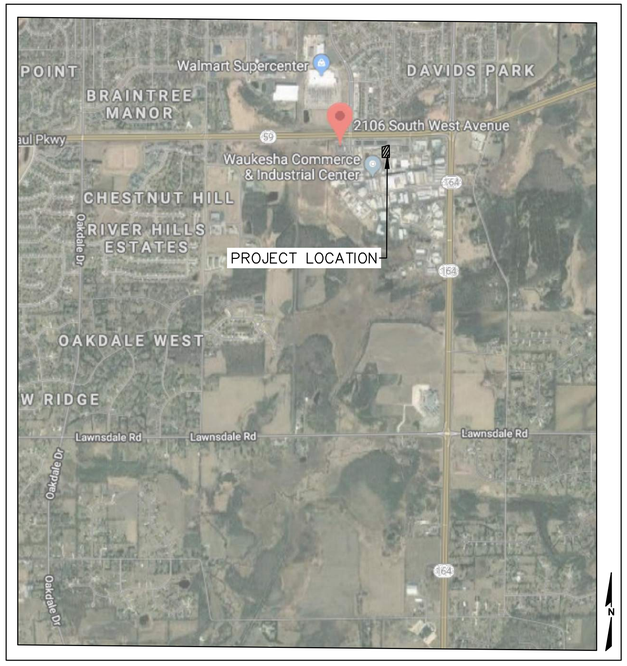
16745 W. BLUEMOUND RD.
BROOKFIELD, WI 53005-5938
PHONE: 262-781-1000

SURVEYOR - CSM
raSmith
JOHN P. CASUCCI, PLS
16745 W. BLUEMOUND RD.
BROOKFIELD, WI 53005-5938
PHONE: 262-781-1000

SURVEYOR - ALTA/ TOPOGRAPHIC SURVEY
JSD Professional Services, Inc.
RIZAL W. ISKANDARSJACH, PLS
W238 N1610 BUSSE RD., SUITE 100
WAUKESHA, WI 53188
PHONE: 262-513-0666



SITE LOCATION MAP



AERIAL LOCATION MAP

SHEET INDEX

T1	COVER SHEET
ALTA	ALTA SURVEY (2 SHEETS)
DP01	DEMOLITION PLAN
SP0	SITE CIRCULATION PLAN
SP1	SITE PLAN
SP2	GRADE PLAN
SP2.1	DETAILED GRADE PLAN - NORTH
SP2.2	DETAILED GRADE PLAN - SOUTH
SP2.6	ACCESSIBLE PLAN
SP3	STORM SEWER PLAN
SP4	UTILITY PLAN
SWP1	EROSION CONTROL PLAN
SWP2	STORMWATER POLLUTION PREVENTION PLAN
SWP3	EROSION CONTROL DETAILS
SWP4	EROSION CONTROL DETAILS
SWP5	SW BMP DETAILS
L1.0	LANDSCAPE PLAN-OVERALL
L1.1	LANDSCAPE PLAN-NORTH
L1.2	LANDSCAPE PLAN-SOUTH

LEGAL DESCRIPTION:

A DIVISION OF PARCEL 1 AND PART OF PARCEL 2 IN CERTIFIED SURVEY MAP NO. 9368, ALL BEING A PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 15, TOWNSHIP 6 NORTH, RANGE 19 EAST, IN THE CITY OF WAUKESHA, WAUKESHA COUNTY, WISCONSIN.

DATUM AND BENCHMARK NOTES, SURVEY PROVIDED BY JSD INC:

1. BEARINGS ARE REFERENCED TO THE WEST LINE OF THE SOUTHEAST 1/4 OF SECTION 15 TOWNSHIP 6 NORTH, RANGE 19 EAST, WHICH HAS A WISCONSIN STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) BEARING OF N00°05'55"W.

   PROJECT CONVERSION FACTOR: GRID/0.99992004 = GROUND

2. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1927
3. VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM OF 1929
4. REFERENCE BENCHMARK: SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 15, TOWNSHIP 6 NORTH, RANGE 19 EAST, CONCRETE MONUMENT W/BRASS CAP, ELEVATION = 810.30
5. BENCHMARK ON SITE: HYDRANT BM-SSE UPPER FLANGE BOLT EL.=817.21

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
1626 OAK STREET
LA CROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

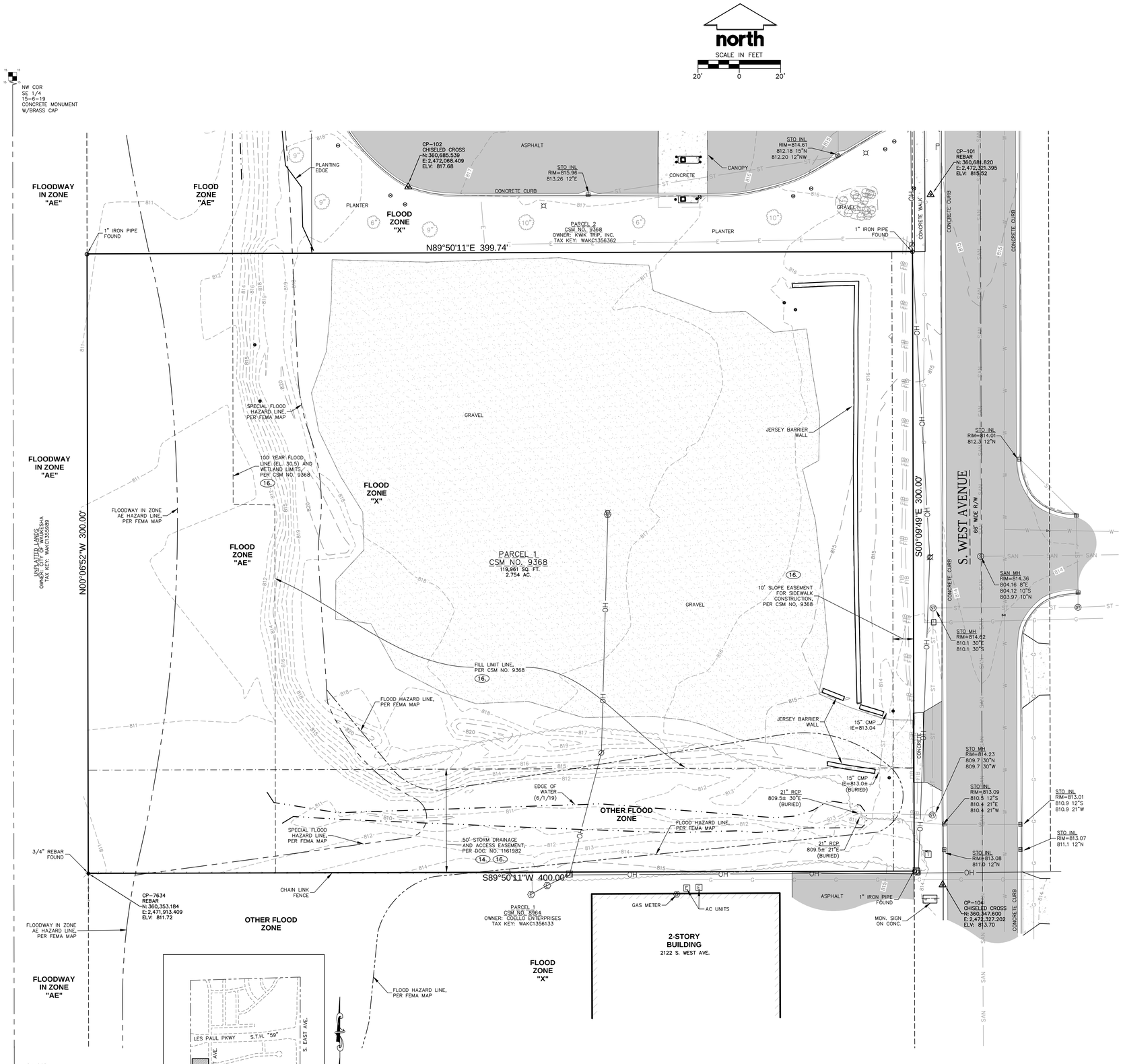
COVER SHEET

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	T1



VICINITY MAP
SE 1/4 SEC. 15-6-19
1"=1000'

LEGEND

SANITARY SEWER MANHOLE		SAN	SANITARY SEWER
STORM SEWER MANHOLE		W	WATER MAIN
MANHOLE UNKNOWN TYPE		ST	STORM SEWER
CLEAN OUT MANHOLE		G	UNDERGROUND GAS
ELECTRICAL MANHOLE		T	UNDERGROUND TELEPHONE
CURB INLET		E	UNDERGROUND ELECTRIC
CATCH BASIN ROUND		FIB	UNDERGROUND FIBER OPTICS
CATCH BASIN SQUARE		OH	OVERHEAD UTILITY
FIRE HYDRANT			
WATER VALVE			DECIDUOUS TREE
TELEPHONE PEDESTAL			
ELECTRICAL PEDESTAL			CONIFEROUS TREE
LIGHT POLE		14.	INDICATES MAPPABLE ITEM FROM SCHEDULE B – SECTION II EXCEPTIONS
SIGN			
TRAFFIC LIGHT SIGNAL POST			

GENERAL NOTES:

1 Bearings are referenced to the West line of the Southeast 1/4 of Section 15 Township 6 North, Range 19 East, which has a Wisconsin State Plane Coordinate System (South Zone) bearing of N00°05'55"W.

Project Conversion Factor: Grid/0.99992004 = Ground

2 Horizontal Datum: North American Datum of 1927

3 Vertical Datum: National Geodetic Vertical Datum of 1929

4 Reference Benchmark: Southwest corner of the Southeast 1/4 of Section 15, Township 6 North, Range 19 East, Concrete Monument w/Brass Cap, Elevation = 810.30

5 This ALTA/NSPS Land Title Survey was prepared and based on First American Title Insurance Company Title Commitment No. NCS-959072-MAD, with an commitment dated of May 08, 2019.

TABLE A ITEMS:

2 Observed posted address number: Site vacant no posted address

3 At the time of this survey portion of this property is located within Zone X (Areas determined to be outside the 0.2% annual chance floodplain) and Zone AE (Areas subject to inundation by the 1% annual chance flood) per FEMA map panel number 55133C0326G, map effective date: Novenber 5, 2014.

4 Gross Land Area:119,961 sq. ft. (2.754 ac.)

6 Per City of Waukesha Verification Request Letter dated May 09, 2019:
"The property is zoned MM-1 Mixed-Use Manufacturing District." The information on file indicates that an automobile service stations provided that all gas pumps meet the setback requirement for the district and are located not closer than 40 feet from any side lot line is Permitted Principal use of this zoning district.

Street Yard Setback: 25'
Side Yard Setback: 10'
Rear Yard Setback: 25'
Shoreyard setback: 75'
Maximum structure height: none, 20' for accessory structure

9 At the time of this survey, property is vacant and have no designated parking stalls.

11 Underground utility locations shown are based on utility mapping and field location markings by "Digger's Hotline", Ticket No. 20192108508 and 20192108511 with a start date of May 31, 2019. Underground utility information is shown for informational purposes only, and is not guaranteed to be accurate or all inclusive. The Contractor/Owner is responsible for making his own determination as to the type and location of underground utilities as may be necessary to avoid damage thereto. Contractor/Owner shall call "Digger's Hotline" prior to the start of any construction activities.

16 At the time of this survey there was no observed evidence of current earth moving work, building construction or building.

17 At the time of this survey there was no proposed changes in street right of way lines or observed evidence of recent street or sidewalk construction or repair.

18 At the time of this survey the property, no wetland markers were observed.

SCHEDULE B - SECTION II EXCEPTIONS

1 to 3, 10 Shown on map, if any.

4 to 9, and 17 to 18 Not survey related.

11. Limitations on Access set forth in conveyance recorded April 24, 1972 on Reel 3, Image 300 as Document No. 813817. **(NOT APPLICABLE)**

12. Declaration of Conditions, Covenants, Restrictions and Easements recorded January 16, 1980 on Reel 394, Image 386 as Document No. 1118407.

13. Utility Easement granted to Wisconsin Electric Power Company recorded February 20, 1980, on Reel 397, Image 1261 as Document No. 1120686. **(NOT APPLICABLE)**

14. Storm Drainage and Access Easement granted to the City of Waukesha, recorded July 08, 1981, on Reel 459, Image 668 as Document No. 1161982.

15. Easement Agreement by and between the City of Waukesha and Bryce P. Styza, recorded May 28, 1996 on Reel 2240, Image 486 as Document No. 2128062. **(NOT APPLICABLE)**

16. Notes and easements as set forth on Certified Survey Map No. 9368, recorded April 30, 2002 as Document No. 2795368:

- One Hundred (100) year Flood Line and Wetland Limits
- Fill Limit Lines
- Fifty (50) foot Storm Drainage & Access Easement
- Ten (10) foot Slope Easement for Sidewalk Construction
  (SLOPE EASEMENT TO BE TERMINATED ON COMPLETION OF CONSTRUCTION OF SIDEWALK)

LEGAL DESCRIPTION:

(Based on First American Title Insurance Company Title Commitment No. NCS-959072-MAD, with an effective dated of May 08, 2019.)

Parcel 1 of Certified Survey Map No. 9368, recorded April 30, 2002, in Volume 85 of Certified Survey Map on Pages 151 to 154, as Document No. 2795368, being a part of the Southwest 1/4 of of the Southeast 1/4 of Section 15, Town 6 North, Range 19 East, in the City of Waukesha, County of Waukesha, State of Wisconsin.

Note: Property Address: S. West Avenue, Waukesha, WI
Tax Key No. WAKC 1356361

SURVEYOR'S CERTIFICATE:

To Kwik Trip, Inc., a Wisconsin corporation and First American Title Insurance Company National Commercial Services:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6, 7a, 7(b)(1), 7(c), 8, 9, 11, 13, 14, 16, 17, 18, 19 and 21 of Table A thereof. The field work was completed on June 1, 2019.

Date of Map: 6/5/19

Rizal W. Iskandarsjach, P.L.S.
Professional Land Surveyor, S-2738
JSD Professional Services, Inc.
W238 N1610 Busse Road, Suite 100
Waukesha, WI 53188
262-513-0666

WISCONSIN RIZAL W. ISKANDARSJACH S-2738 MILWAUKEE, WIS. LAND SURVEYOR

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners

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- CONSTRUCTION SERVICES
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- PLANNING & DEVELOPMENT
- TRANSPORTATION ENGINEERING
- LANDSCAPE ARCHITECTURE

MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE ROAD, SUITE 100
WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
MADISON | MILWAUKEE
KENOSHA | APPLETON
www.jsdinc.com

SERVICES PROVIDED TO:

KWIK TRIP INCORPORATED

PROJECT:
2106 S. WEST AVENUE
KWIK TRIP
STORE NO. 970

PROJECT LOCATION:
WAUKESHA, WI
WAUKESHA COUNTY

JSD PROJECT NO.: 19-9152

SEAL/SIGNATURE:

ALTHOUGH EVERY EFFORT HAS BEEN MADE IN PREPARING THESE PLANS AND CHECKING THEM FOR ACCURACY, THE CONTRACTOR AND SUBCONTRACTORS MUST CHECK ALL DETAIL AND DIMENSIONS OF THEIR TRADE AND BE RESPONSIBLE FOR THE SAME.

SURVEYED BY:	CJH	06-01-19
DRAWN BY:	APM	06-04-19
CHECKED BY:	RWI	06-05-19

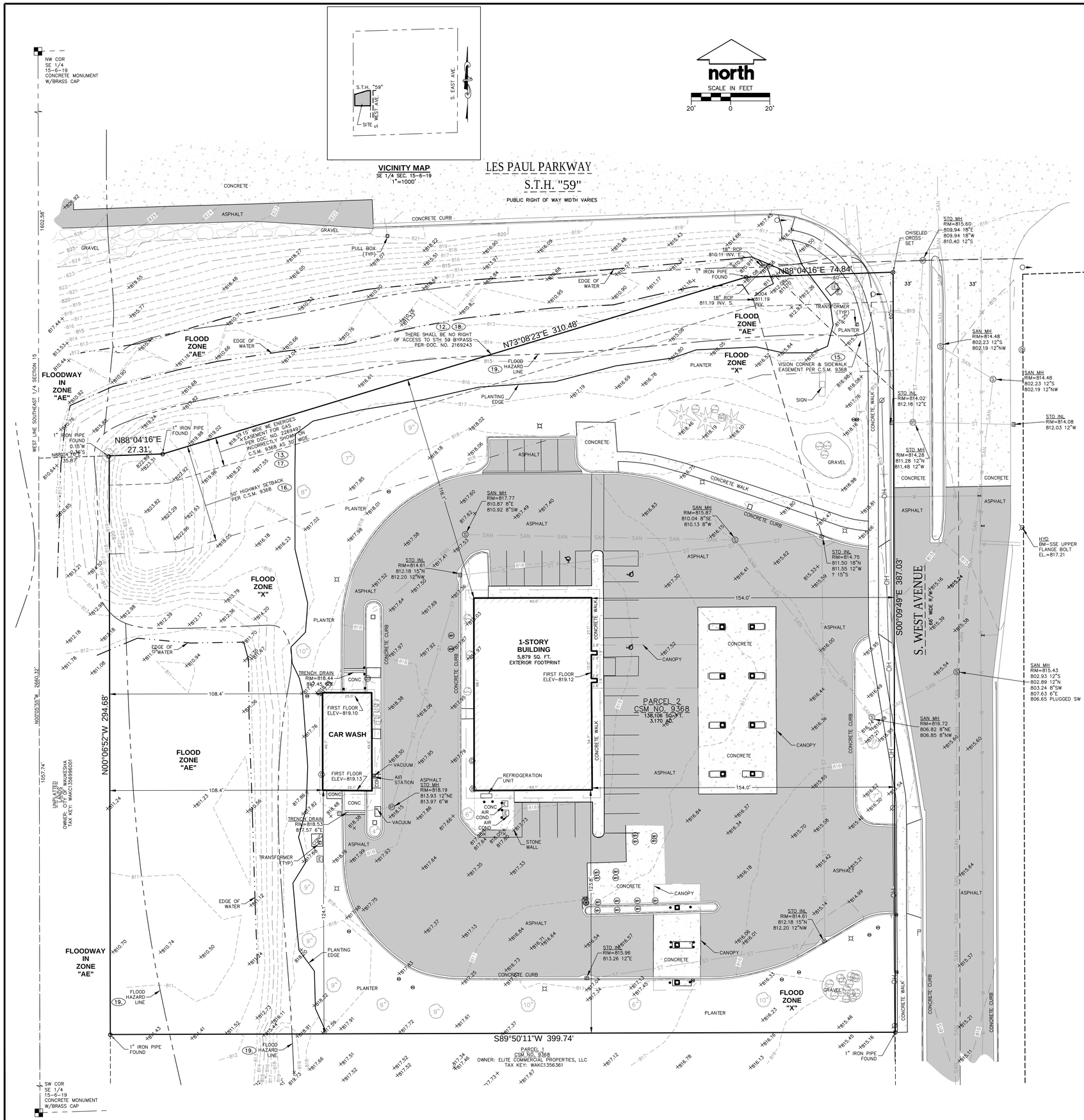
PLAN MODIFICATIONS:

DIGGERS HOTLINE
Call 811 or (800) 242-8511
Milwaukee Area (262) 432-7910
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

SHEET TITLE:
ALTA/NSPS
LAND TITLE
SURVEY

SHEET NUMBER:
CS-1

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF JSD PROFESSIONAL SERVICES, INC.



LEGEND

SANITARY SEWER MANHOLE		SAN	SANITARY SEWER
STORM SEWER MANHOLE		W	WATER MAIN
MANHOLE UNKNOWN TYPE		ST	STORM SEWER
CLEAN OUT MANHOLE		G	UNDERGROUND GAS
ELECTRICAL MANHOLE		T	UNDERGROUND TELEPHONE
CURB INLET		E	UNDERGROUND ELECTRIC
CATCH BASIN ROUND		FIB	UNDERGROUND FIBER OPTICS
CATCH BASIN SQUARE		OH	OVERHEAD UTILITY
FIRE HYDRANT			
WATER VALVE			DECIDUOUS TREE
TELEPHONE PEDESTAL			
ELECTRICAL PEDESTAL			CONIFEROUS TREE
LIGHT POLE			
SIGN		14.	INDICATES MAPPABLE ITEM FROM SCHEDULE B – SECTION II EXCEPTIONS
TRAFFIC LIGHT SIGNAL POST			

GENERAL NOTES:

1 Bearings are referenced to the West line of the Southeast 1/4 of Section 15 Township 6 North, Range 19 East, which has a Wisconsin State Plane Coordinate System (South Zone) bearing of N00°05'55"W.

Project Conversion Factor: Grid/0.99992004 = Ground

2 Horizontal Datum: North American Datum of 1927

3 Vertical Datum: National Geodetic Vertical Datum of 1929

4 Reference Benchmark: Southwest corner of the Southeast 1/4 of Section 15, Township 6 North, Range 19 East, Concrete Monument w/Brass Cap, Elevation = 810.30

5 This ALTA/NSPS Land Title Survey was prepared and based on First American Title Insurance Company Title Commitment No. NCS–861351–22–MAD, with an effective dated of August 04, 2017.

TABLE A ITEMS:

2 Observed posted address number: 2106

3 At the time of this survey portion of this property is located within Zone X (Areas determined to be outside the 0.2% annual chance floodplain) and Zone AE (Areas subject to inundation by the 1% annual chance flood) per FEMA map panel number 55133C0326G, map effective date: Novenber 5, 2014.

4 Gross Land Area:138,106 sq. ft. (3.170 ac.)

6 Per City of Waukesha Verification Request Letter dated July 25, 2017:
"The property is zoned M–2, General Manufacturing District. The information on file indicates the use of this building as a Gas Station & Convenience Store and is a conditional use within this zoning district".

Street Yard Setback: 25'
Side Yard Setback: 10'
Rear Yard Setback: 25'
Shoreyard setback: 75'
Maximum structure height: none, 20' for accessory structure

9 At the time of this survey, property has the following designated parking stalls:

Standard Car Parking Stalls: 24
ADA assigned Car Parking Stalls: 3 +
TOTAL PARKING STALLS: 27

11 Underground utility locations shown are based on field location markings by "Digger's Hotline", Ticket No. 20173002904 with a start date of July 27, 2017. Underground utility information is shown for informational purposes only, and is not guaranteed to be accurate or all inclusive. The Contractor/Owner is responsible for making his own determination as to the type and location of underground utilities as may be necessary to avoid damage thereto. Contractor/Owner shall call "Digger's Hotline" prior to the start of any construction activities.

16 At the time of this survey there was no observed evidence of current earth moving work, building construction or building.

17 At the time of this survey there was no proposed changes in street right of way lines or observed evidence of recent street or sidewalk construction or repair.

18 At the time of this survey the property, no wetland markers were observed.

SCHEDULE B - SECTION II EXCEPTIONS

1 to 3 & 8 Shown on map, if any.

4 to 7, 9 & 20 to 27 Not survey related.

10. Access restrictions and limitations to and from C.T.H. "A" as contained in a Conveyance by Individual recorded on April 24, 1972, in Reel 3, Image 300, as Document No. 813817. Does not affect property–expired.

11. Restrictions, conditions, covenants, easements, charges and/or assessments contained in a Declaration of Conditions, Covenants, Restrictions and Easements recorded on January 16, 1980, in Reel 394, Image 586, as Document No. 1118407. Affects property–General in nature, cannot be plotted.

12. Access restriction to S.T.H. "59" as contained in a Warranty Deed recorded on November 1, 1996, in Reel 2334, Image 267, as Document No. 2169243. (Affects property–No right of access to STH 59 bypass.)

13. Utility Easement recorded on December 8, 1997, in Reel 2557, Image 532, as Document No. 2269497.

14. Reservation for slope easement for sidewalk construction, affecting the Northerly 25 feet and East 10 feet of the premises described in Schedule A hereof, and note, as shown on the recorded plat of Certified Survey Map No. 9368 reciting as follows: "Slope easement to be terminated on completion of construction of sidewalk". Does not affect property–not shown, easement expired.

15. Reservation for vision corner and sidewalk corner easements affecting the Northeast corner of the premises described in Schedule A hereof, as shown on the recorded plat of Certified Survey Map No. 9368. Affects property–shown

16. Fifty foot highway setback line from S.T.H. "59" a/k/a Les Paul Parkway as shown on the recorded plat of Certified Survey Map No. 9368. Affects property–shown

17. Reservation for gas easement affecting the Northerly 30 feet of the premises described in Schedule A hereof, as shown on the recorded plat of Certified Survey Map No. 9368. Affects property as shown–Only 15' Affects property as described in Document No. 2269497

18. Access restriction to S.T.H. "59" a/k/a/ Les Paul Parkway as shown on the recorded plat of Certified Survey Map No. 9368. Affects property–shown

19. 100 year flood line, wetland limit affecting westerly portion of the premises described in Schedule A hereof, as shown on the recorded plat of Certified Survey map No. 9368. Affects property–shown, Flood plane lines as taken from FIRM panel.

LEGAL DESCRIPTION:

(Based on First American Title Insurance Company Title Commitment No. NCS–861351–22–MAD, with an effective dated of August 04, 2017.)

Parcel Two (2) in Certified Survey map No. 9368, being part of the Southwest Quarter of the Southeast Quarter (SW 1/4 SE 1/4) of Section (15), Township Six (6) North, Range Nineteen (19) East, in the City of Waukesha, Waukesha County, Wisconsin and recorded in the Office of the Register of Deeds for Waukesha County on April 30, 2002 in Volume 85 Volume 85 of Certified Survey Maps, pages 151–154 as Document No. 2795368.

Note: Property Address: 2106 S. West Avenue, Waukesha, WI
Tax Key No. WAKC 1356362

SURVEYOR'S CERTIFICATE:

To Kwik Trip, Inc., a Wisconsin corporation; PDQ Food Strores, Inc., and First American Title Insurance Company National Commercial:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6, 7a, 7(b)(1), 7(c), 8, 9, 11, 13, 14, 16, 17, 18, 19 and 21 of Table A thereof. The field work was completed on August 4, 2017.

Date of Map: September 20, 2017

Rizal W. Iskandarsjach, P.L.S.
Professional Land Surveyor, S–2738
JSD Professional Services, Inc.
N22 W22931 Nancys Court, Suite 3
Waukesha, WI 53186
262–513–0666

WISCONSIN RIZAL W. ISKANDARSJACH S–2738 MILWAUKEE, WIS. LAND SURVEYOR

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- TRANSPORTATION ENGINEERING
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WAUKESHA, WISCONSIN 53186
262.513.0666 PHONE | 262.513.1232 FAX
MADISON | MILWAUKEE
KENOSHA | APPLETON
www.jsdinc.com

SERVICES PROVIDED TO:

KWIK TRIP INCORPORATED

PROJECT:
2106 S. WEST AVENUE
KWIK TRIP
STORE NO. 970

PROJECT LOCATION:
WAUKESHA, WI
WAUKESHA COUNTY

JSD PROJECT NO.: 17-8133-970

SEAL/SIGNATURE:

ALTHOUGH EVERY EFFORT HAS BEEN MADE IN PREPARING THESE PLANS AND CHECKING THEM FOR ACCURACY, THE CONTRACTOR AND SUBCONTRACTORS MUST CHECK ALL DETAIL AND DIMENSIONS OF THEIR TRADE AND BE RESPONSIBLE FOR THE SAME.

SURVEYED BY:	BRG	07-25-17
DRAWN BY:	DHS	08-14-17
CHECKED BY:	AWW	09-20-17

PLAN MODIFICATIONS:

DIGGERS HOTLINE
Call 811 or (800) 242-8511
Milwaukee Area (262) 432-7910
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

SHEET TITLE:
ALTA/NSPS
LAND TITLE
SURVEY

SHEET NUMBER:
CS-1

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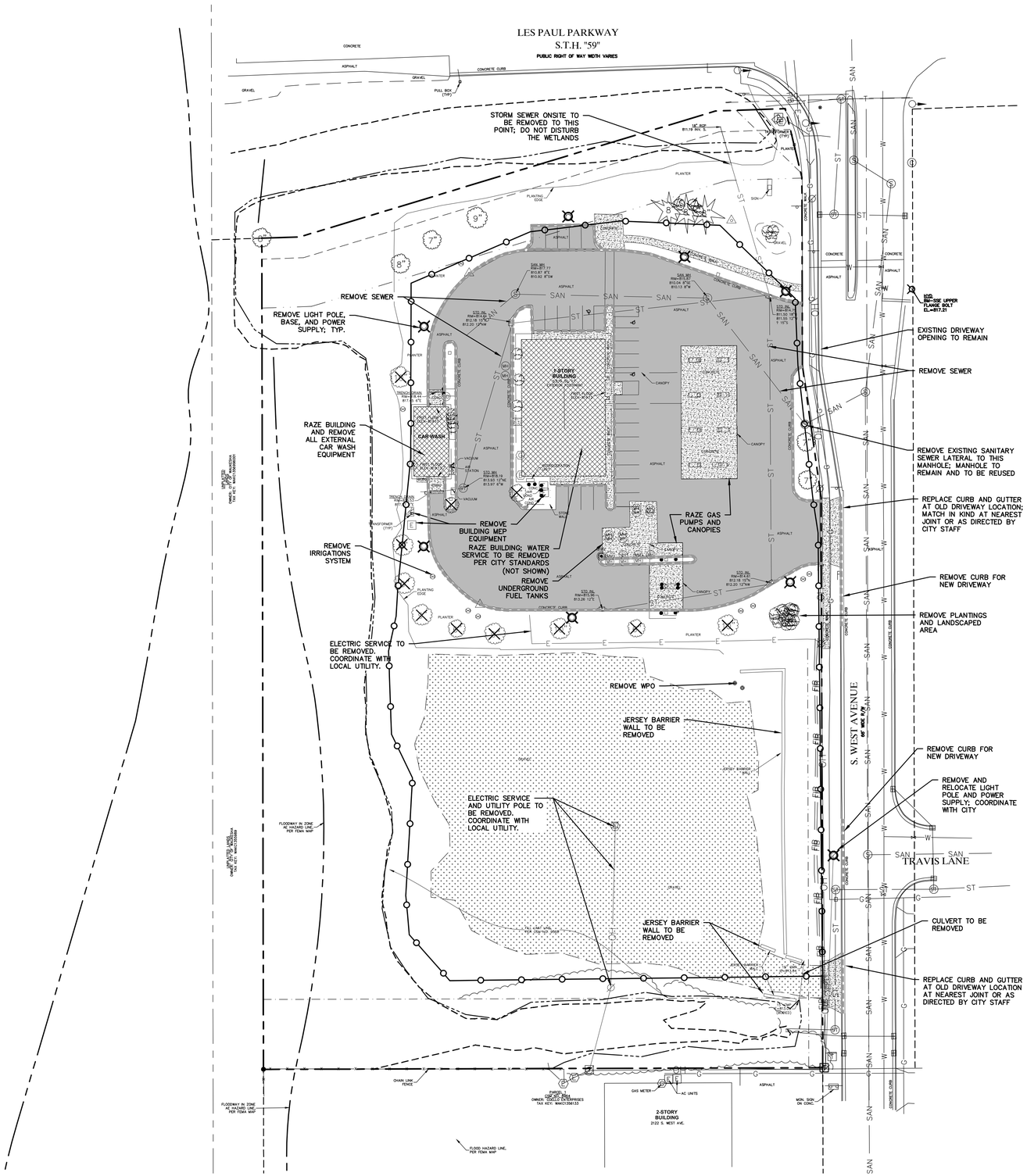

SCALE: 1" = 40'

10 5 10 0 10 20

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=80'.

LEGEND

- PROPERTY LINE/ RIGHT OF WAY
- DEMO CURB & GUTTER
- SAWCUT PAVEMENT
- TEMPORARY CONSTRUCTION FENCE
- EXISTING LIGHT POLE AND BASE, BOLLARD, FOUNDATION AND/OR SIGN TO BE REMOVED
- EXISTING GRAVEL TO BE REMOVED
- EXISTING CONCRETE PAVEMENT TO BE REMOVED
- EXISTING ASPHALT PAVEMENT TO BE REMOVED
- EXISTING BUILDING/STRUCTURE, FOUNDATION AND SLAB TO BE REMOVED

- INITIAL EROSION CONTROL MEASURES (SILT FENCE, ROCK CONSTRUCTION ENTRANCE, INLET PROTECTION) SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN PROJECT LIMITS.
- STABILIZE ALL DISTURBED AREAS AS SOON AS GRADING IS COMPLETE IN AN AREA. ENSURE SEEDING MEASURES, EROSION CONTROL MATTING AND MISCELLANEOUS EROSION CONTROL DEVICES ARE INSTALLLED AS INDICATED ON THE EROSION CONTROL PLANS. PERMANENT SEEDING AND TEMPORARY SEEDING SHALL BE INSTALLED PER THE GENERAL SOIL STABILIZATION SPECIFICATIONS LISTED ON SWPPP SHEET SWP2.
- UPON FOLLOWING SPRING SEASON OF CONSTRUCTION, CHECK THE VEGETATIVE COVER IN AREAS WHERE SEEDING WAS PLACED DURING THE FALL OF THE PREVIOUS YEAR. RESEED AREAS WHERE VEGETATION IS NO LONGER ESTABLISHED OR HAS DIED. INSPECT ALL EROSION CONTROL DEVICES AND REPAIR AS NECESSARY. RESUME CONSTRUCTION ACTIVITY: CONTINUE BUILDING CONSTRUCTION, UTILITY INSTALLATION, AND PAVING.

DEMOLITION NOTES TO CONTRACTOR

1. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL SITE AND DEMOLITION PERMITS.
2. THE DEMOLITION CONTRACTOR SHALL PREPARE AND MAINTAIN A PROJECT SAFETY PLAN. ALL SITE SAFETY EQUIPMENT AND MEASURES, INCLUDING FENCING, FIRE PROTECTION, AND THE LIKE ARE THE SOLE RESPONSIBILITY OF THE DEMOLITION CONTRACTOR.
3. THE DEMOLITION CONTRACTOR SHALL DEVELOP, OBTAIN NECESSARY APPROVALS/PERMITS AND MAINTAIN TRAFFIC AND PEDESTRIAN CONTROL PLANS THROUGHOUT ALL PHASES OF DEMOLITION.

CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE CITY OF WAUKESHA EROSION CONTROL ORDINANCE, THE WISCONSIN DNR STORMWATER CONSTRUCTION AND POST CONSTRUCTION TECHNICAL STANDARDS, WDNR PERMIT CONDITIONS, AND THESE DOCUMENTS; THE MOST STRINGENT TO APPLY.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

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

R.A.SMITH ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A.SMITH

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
P.O. BOX 2107
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Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

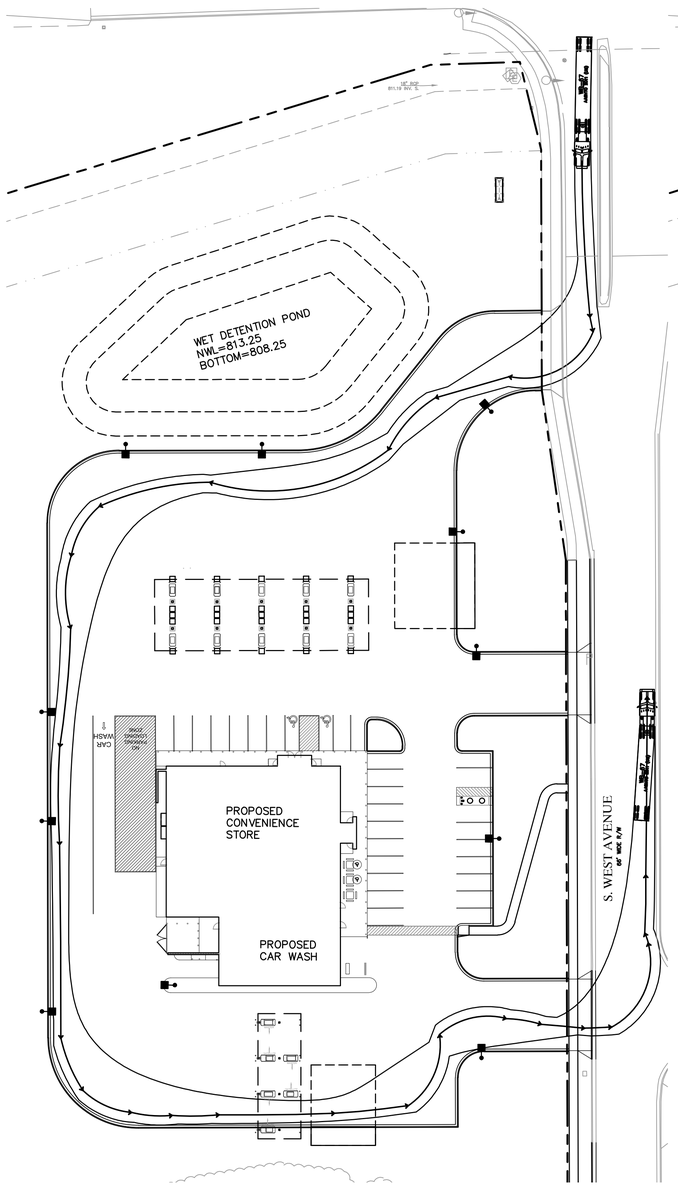
DEMOLITION PLAN

CONVENIENCE STORE #970

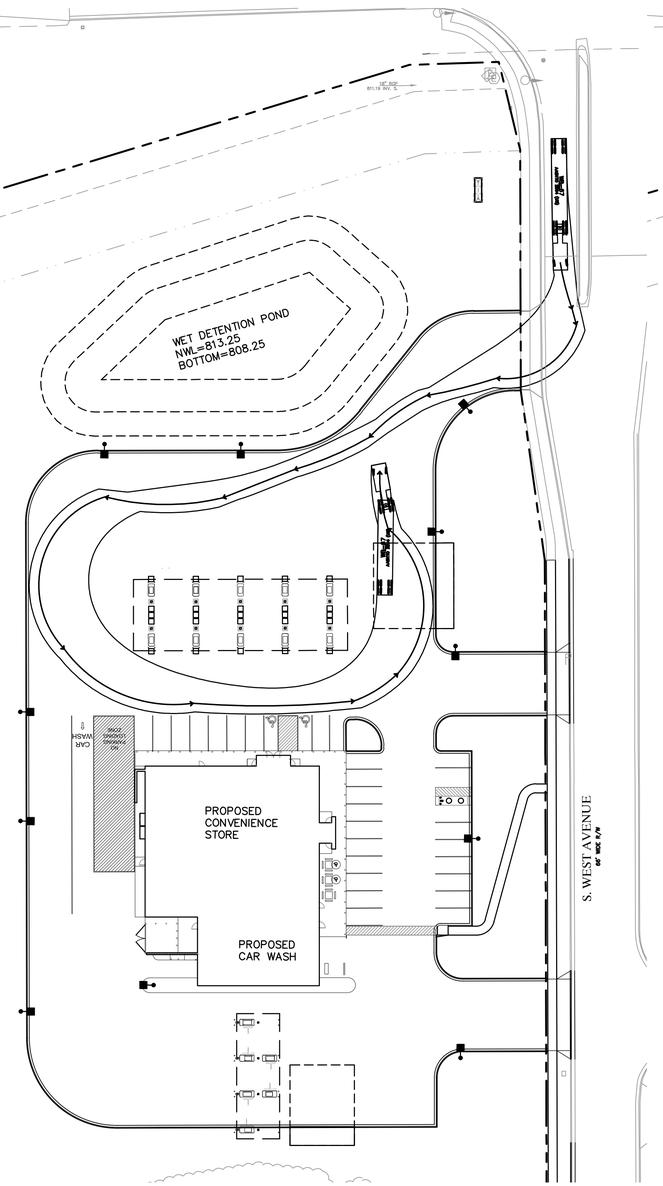
2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

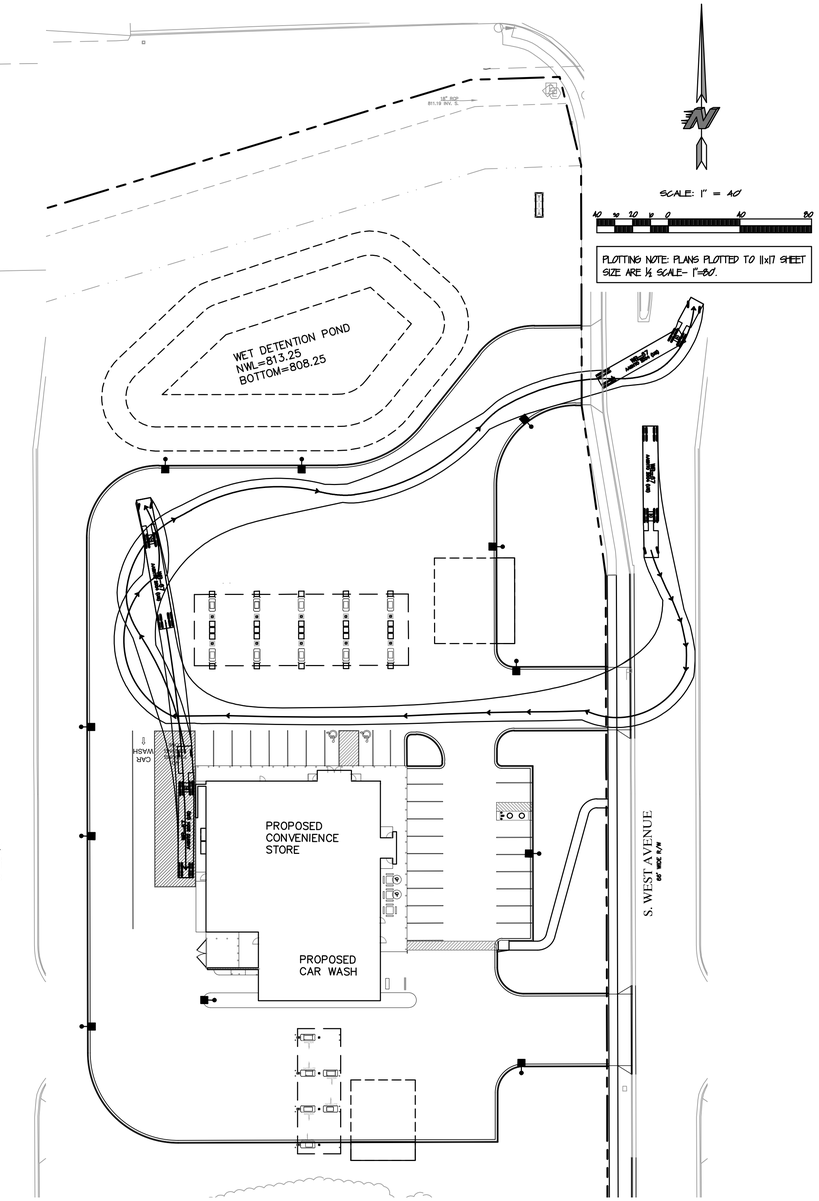
DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	DP01



DIESEL ROUTE



FUEL ROUTE



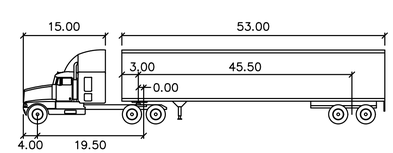
GROCERY ROUTE

LEGEND

PROPERTY LINE

PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN)

PROPOSED SIGN



WB-67

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

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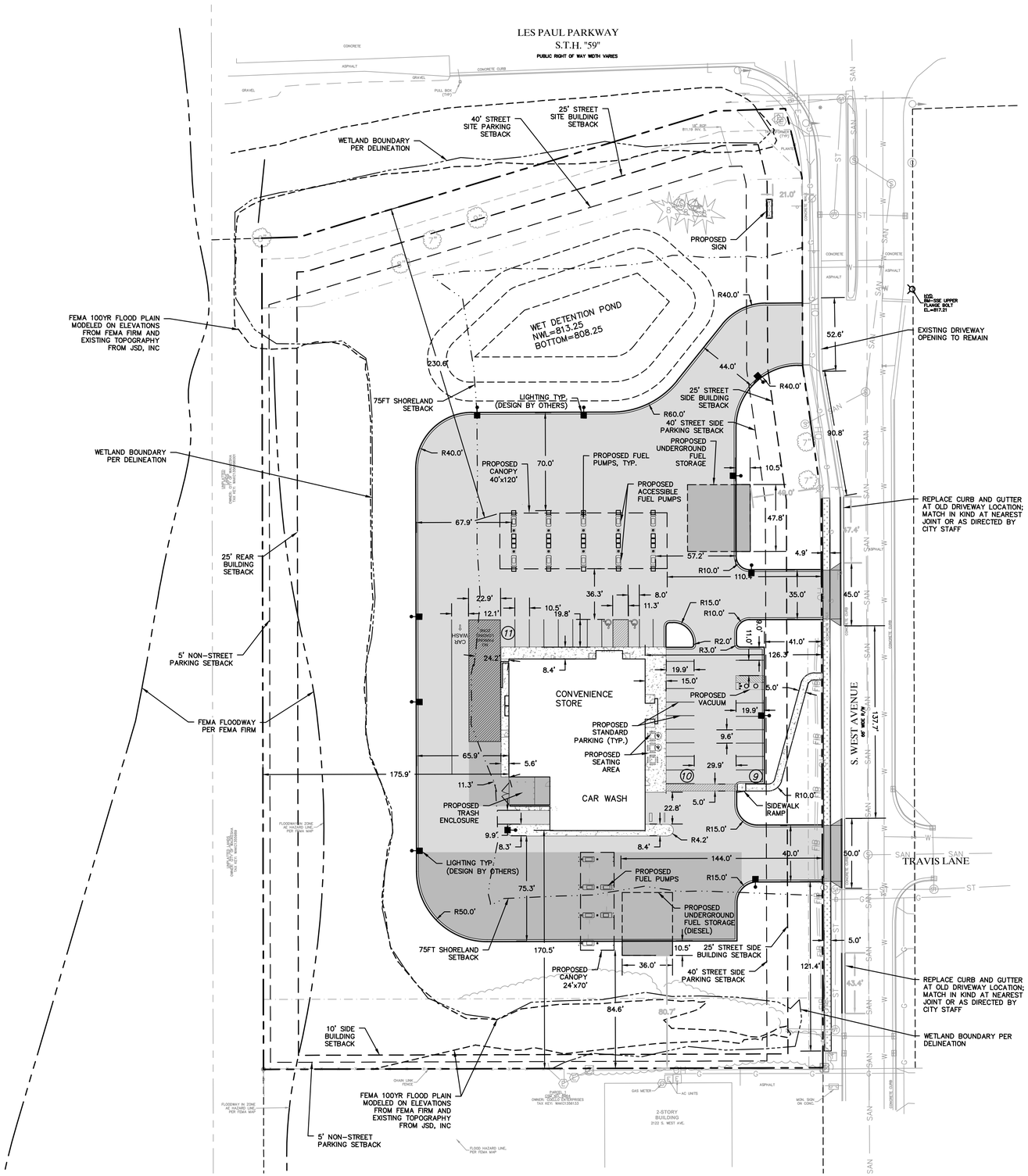
SITE CIRCULATION PLAN

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP0



SCALE: 1" = 40'

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=80'.

SITE STATISTICS

	SQFT	AC	COVERAGE
PARCEL AREA	254,737	5.85	
PROPOSED BUILDING AREA	11,122	0.26	4.4%
PROPOSED PERVIOUS	155,811	3.58	61.2%
PROPOSED IMPERVIOUS	98,926	2.27	38.8%

KWIK TRIP STANDARD PARKING STATISTICS

STANDARD PARKING STALLS	28
ACCESSIBLE STALLS	2
FUELING STALLS	18
ACCESSIBLE FUELING STALLS	2
TOTAL STANDARD PARKING SPACES	50

KWIK TRIP DIESEL STATISTICS

DIESEL FUELING STALLS	3

ZONING INFORMATION

CURRENT ZONING	M-2
BUILDING SETBACK	
STREET	25'
SIDE	10'
REAR	25'
PARKING SETBACK	
STREET	40'
NON-STREET	5'

LEGEND

- PROPERTY LINE
- 75FT SHORELAND BUFFER
- WETLAND LIMITS
- FEMA 100YR FLOODPLAIN
- PROPOSED CONCRETE PAVEMENT – 8 INCH
- PROPOSED CONCRETE PAVEMENT – 6 INCH
- PROPOSED CONCRETE SIDEWALK SEE SP1.1 FOR LOCATION & TYPE
- PROPOSED CONCRETE SIDEWALK – PUBLIC:
  - 4 INCH CONCRETE
  - 6" AGGREGATE BASE
  - JOINTS 5' O.C.
- PROPOSED PARKING SPACES
- PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN)
- PROPOSED SIGN

CONSTRUCTION NOTE:

CONSTRUCTION FENCING TO BE INSTALLED AROUND ENTIRE CONSTRUCTION SITE. COORDINATE WITH OWNER FOR FENCING AND GATE LOCATIONS AND APPROPRIATE SIGNAGE INSTALLATION.

LAYOUT NOTES:

1. PLAN PREPARED FROM LDS ALTA/NSPS LAND TITLE SURVEY, DATED JUNE 5, 2019 & SEPTEMBER 20, 2017.
2. CURBS ARE DIMENSIONED TO FACE OF CURB.
3. UNLESS SHOWN OTHERWISE ON THIS DRAWING, CONTRACTOR SHALL PROVIDE CONTROL JOINTS, CONSTRUCTION JOINTS, AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS AND DRIVES.
   CONTROL JOINT MAXIMUM DISTANCE: WALKS– 8' O.C., ALL OTHERS– 10' O.C. SAW CUT CONTROL JOINTS MINIMUM ONE–QUARTER CONCRETE THICKNESS.
   EXPANSION JOINT MAXIMUM DISTANCE: WALKS– 24' O.C., ALL OTHERS– 40' O.C.
   DOWEL ALL EXPANSION JOINTS– MAXIMUM 24" O.C.
4. CONCRETE IN ISLAND COMPLEX AND UNDER CANOPY TO BE ROUGH BROOM FINISHED. SIDEWALKS ADJACENT TO BUILDING SHALL BE SMOOTH BROOM FINISHED.
5. EXTERIOR CONCRETE SURFACES TO BE SEALED. CONCRETE SEALER:
   APR 15– OCT 31 USE: TK–26UV
   NOV 1– DEC 31 USE: TK–290
6. EXPANSION JOINTS SHALL BE DECK–O–FOAMED AND CAULKED WITH SL1

STREET AND SIDEWALK RESTORATION:

LIMITS OF FINAL CITY STREET PAVEMENT AND CURB & GUTTER REMOVAL AND REPLACEMENT TO BE MARKED BY CITY ENGINEERING STAFF IN THE FIELD.

SOIL MANAGEMENT

ALL PETROLEUM IMPACTED OR OTHER UNSUITABLE SOILS TO BE HANDLED BY APPROPRIATELY LICENSED AND CERTIFIED CONTRACTORS. COORDINATE WITH OWNER'S ENVIRONMENTAL CONSULTANT.

FOR MORE INFORMATION, SEE LIMITED SITE INVESTIGATION REPORTS FOR THE PROPERTY COMPLETED BY TERRACON CONSULTANTS, INC.

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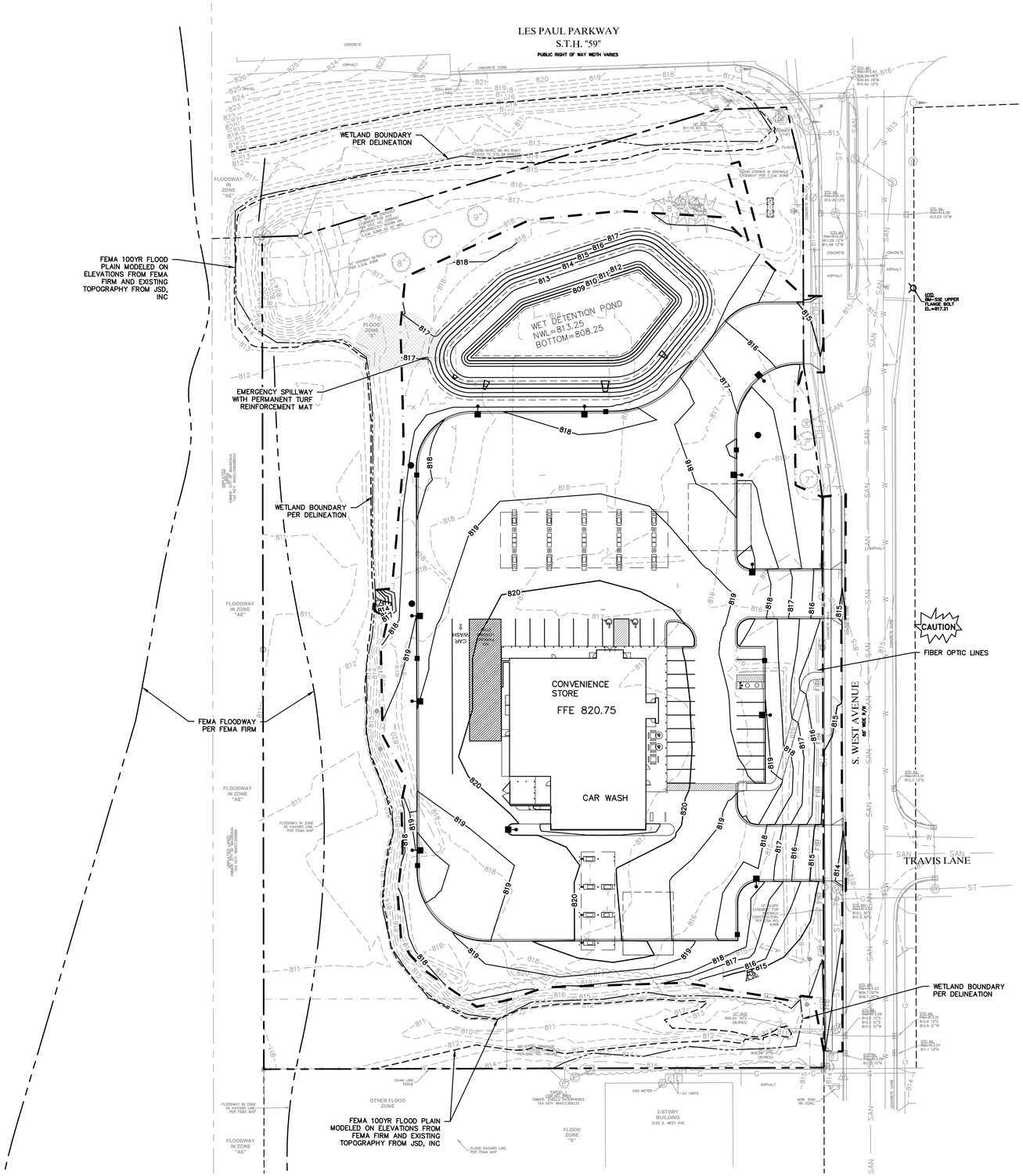
SITE PLAN

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP1



LEGEND

- PROPERTY LINE
- 840.00 × EXISTING SPOT ELEVATION
- 840 EXISTING CONTOURS
- 840 PROPOSED CONTOURS
- 840.00 × PROPOSED SPOT GRADES
- (840.00) × PROPOSED TOP OF CURB GRADE
- T/I 840.00 × PROPOSED TOP OF ISLAND GRADE
- ■ ● PROPOSED STORM INLETS / MANHOLES
- WETLAND LIMITS
- FEMA 100YR FLOODPLAIN
- LIMITS OF DISTURBANCE = 3.86 ACRES
- PROPOSED PERMANENT TURF REINFORCEMENT MAT

SCALE: 1" = 40'

40 20 10 0 40 80

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=80'.

NOTE:

CONTRACTOR TO OBTAIN RIGHT-OF-WAY EXCAVATION PERMIT PRIOR TO BEGINNING SITE WORK.

CONSTRUCTION NOTE:

CONSTRUCTION FENCING TO BE INSTALLED AROUND ENTIRE CONSTRUCTION SITE. COORDINATE WITH OWNER FOR FENCING AND GATE LOCATIONS AND APPROPRIATE SIGNAGE INSTALLATION.

NOTE:

- REFER TO OTHER PROJECT PLANS AND INFORMATION RELATED TO THIS PROJECT PRIOR TO BEGINNING ANY GRADING WORK.

- PLAN PREPARED FROM LDS ALTA/NSPS LAND TITLE SURVEY, DATED JUNE 5, 2019 & SEPTEMBER 20, 2017.

- CONTRACTOR SHALL LOCATE ALL UTILITIES WHICH MAY AFFECT THIS WORK PRIOR TO CONSTRUCTION AND NOTIFY OWNER OF ANY CONFLICTS.

- CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED ELEVATIONS PRIOR TO START OF CONSTRUCTION. VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH WALK AND/ OR PAVEMENTS TO REMAIN. MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES AND DRIVEWAY ENTRANCES. RESTORE ALL EXISTING PAVEMENTS THAT REMAIN TO THEIR ORIGINAL, IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS.
- AREAS NOT PAVED AND TO BE LANDSCAPED SHALL RECEIVE MINIMUM OF 4" DEPTH COMPACTED TOPSOIL.

- CONTRACTOR SHALL COORDINATE GRADING AND INSTALLATION OF DRIVES IN R.O.W. WITH APPROPRIATE GOVERNMENT AGENCIES. OBTAIN APPROPRIATE PERMITS FOR GRADING AND DRAINAGE IN ALL R.O.W.

- REFER TO OWNER'S SPECIFICATIONS FOR CURB, APPROACH, BITUMINOUS, AND CONCRETE PROFILES, AS WELL AS ADDITIONAL SITE STANDARDS RELATED TO THIS PROJECT.

FINISHED FLOOR ELEV.
PROPOSED KWIK TRIP CONVENIENCE STORE & CARWASH = FINISHED FLOOR ELEVATION = 820.75 FEET

NOTE GRADING CONTRACTOR:

ANY PROPERTY IRONS THAT ARE DISTURBED IN THE GRADING PROCESS SHALL BE RESET BY A LICENSED LAND SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.

WET DETENTION POND ▽ PONDING ELEVATIONS

100YR PONDING ELEV. = 815.44
10YR PONDING ELEV. = 814.66
2YR PONDING ELEV. = 814.22
1YR PONDING ELEV. = 814.09

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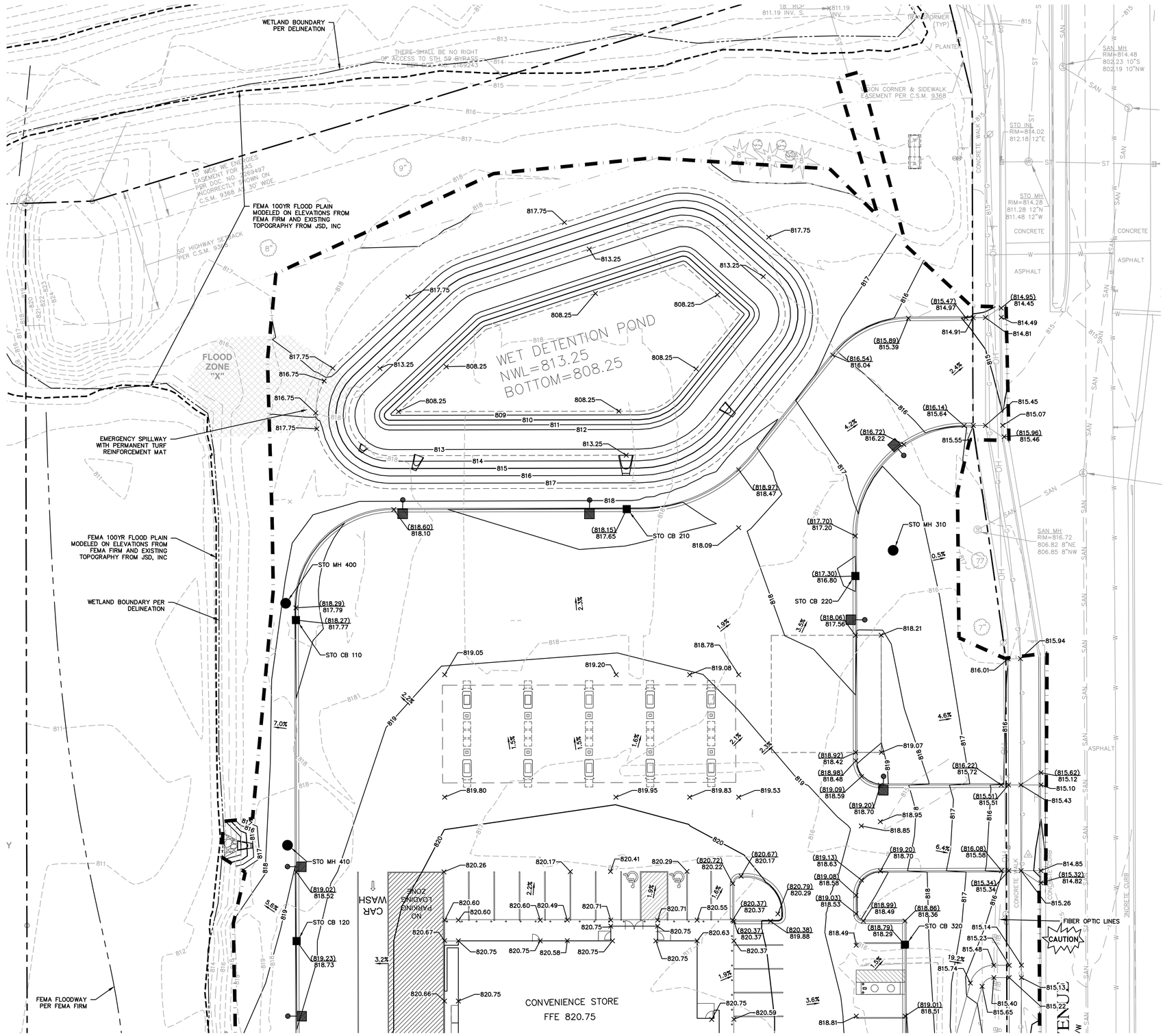
GRADE PLAN

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP2



SCALE: 1" = 20'

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=40'.

LEGEND

- PROPERTY LINE
- 840.00 × EXISTING SPOT ELEVATION
- 840 EXISTING CONTOURS
- 840 PROPOSED CONTOURS
- 840.00 × PROPOSED SPOT GRADES
- (840.00) × PROPOSED TOP OF CURB GRADE
- T/I 840.00 × PROPOSED TOP OF ISLAND GRADE
- ■ ● PROPOSED STORM INLETS / MANHOLES
- WETLAND LIMITS
- FEMA 100YR FLOODPLAIN
- LIMITS OF DISTURBANCE = 3.86 ACRES
- PROPOSED PERMANENT TURF REINFORCEMENT MAT

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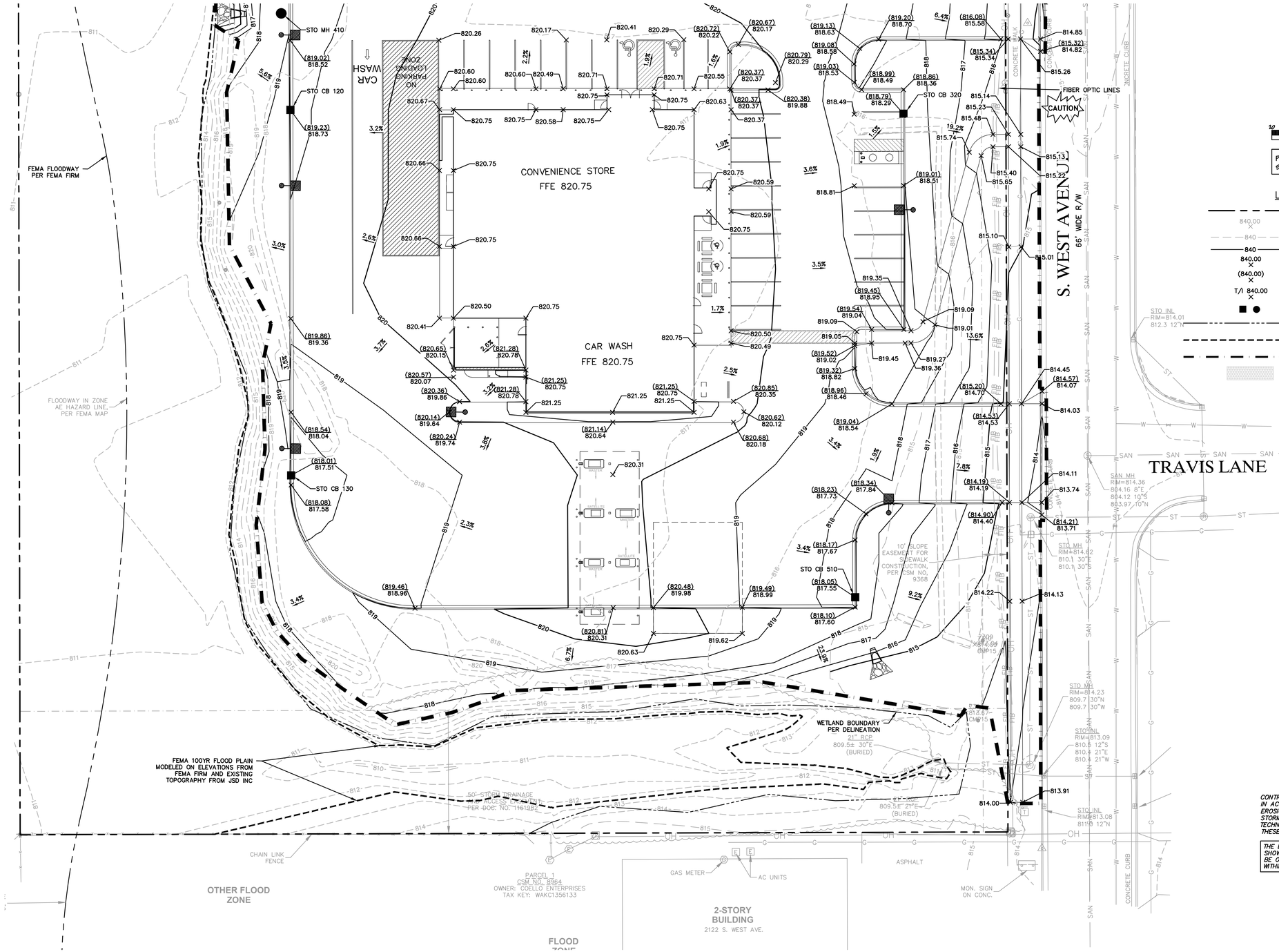
DETAILED GRADE PLAN - NORTH

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP2.1



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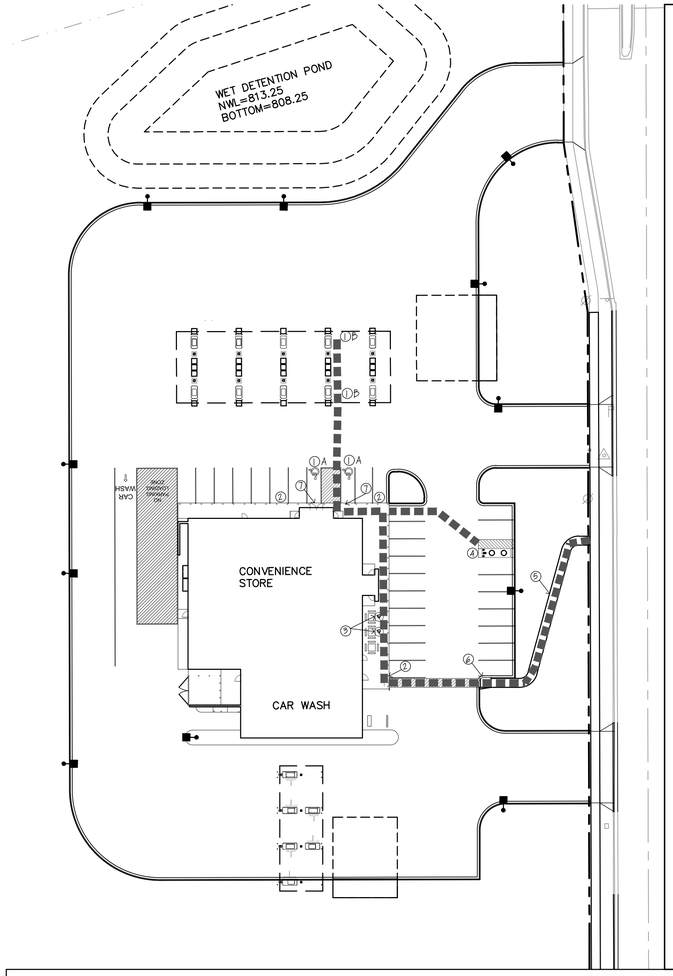
DETAILED GRADE PLAN - SOUTH

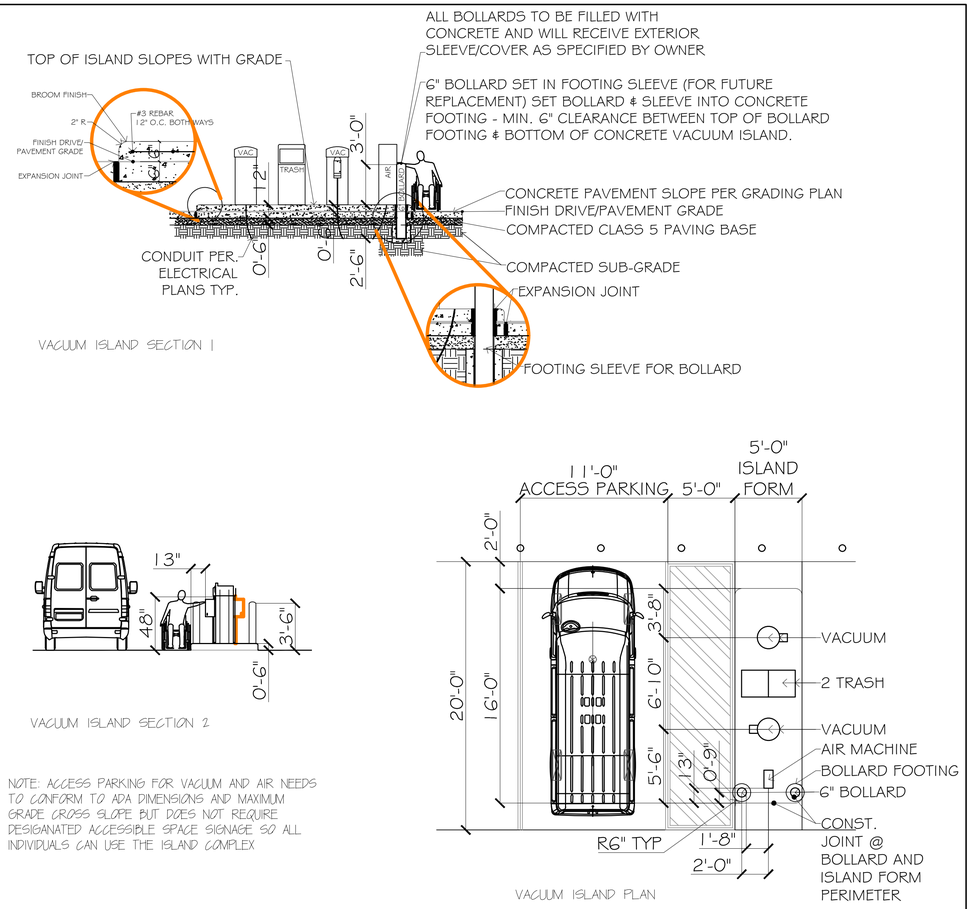
CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP2.2





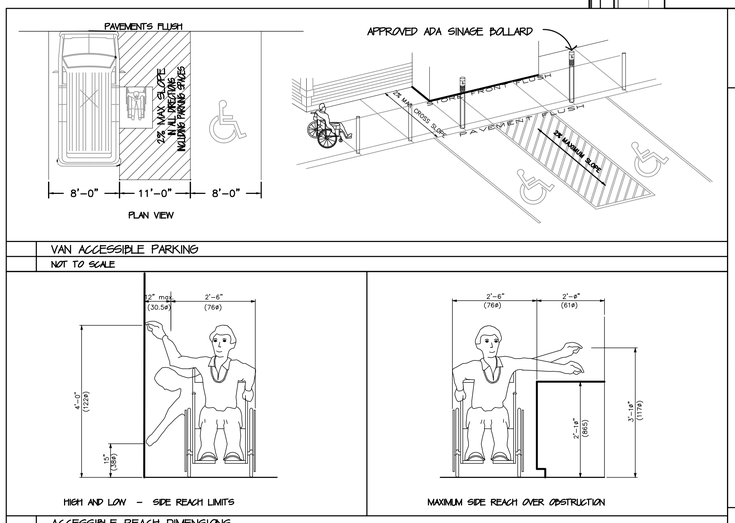
VACUUM ISLAND SECTION 1

VACUUM ISLAND SECTION 2

NOTE: ACCESS PARKING FOR VACUUM AND AIR NEEDS TO CONFORM TO ADA DIMENSIONS AND MAXIMUM GRADE CROSS SLOPE BUT DOES NOT REQUIRE DESIGNATED ACCESSIBLE SPACE SIGNAGE SO ALL INDIVIDUALS CAN USE THE ISLAND COMPLEX

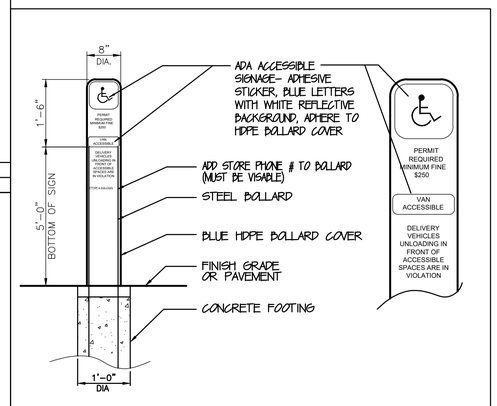
VACUUM ISLAND PLAN

VACUUM ISLAND DETAILS
NOT TO SCALE



VAN ACCESSIBLE PARKING
NOT TO SCALE

ACCESSIBLE REACH DIMENSIONS
NOT TO SCALE



ADA BOLLARD SIGNAGE
NOT TO SCALE

PLAN KEYNOTES

1. ACCESSIBLE STALLS
   A. STRIPING – 4" WIDE STALL LINES, USE HIGH VISIBILITY BLUE PAINT.
   SPACES PROVIDED
   (2) 8'–0"x 20'–0" MIN. ACCESSIBLE PARKING WITH
   (1) 8'–0"x 20'–0" MIN. LOADING ZONE
   B. ACCESSIBLE FUELING POINT AND DISPENSER AND VALET. VALET AND KEY PAD ON PUMP SHALL CONFORM TO ADA REACH DIMENSIONS AS SHOWN IN DETAIL. SEE NOTES FOR CONVENIENCE STORE ACCESSIBILITY.
2. PAVEMENTS FLUSH FOR ACCESSIBILITY.
3. PICNIC TABLE W/ ACCESSIBLE PLACEMENT, PROVIDE TRASH CONTAINER
4. ACCESSIBLE VACUUM & AIR INSTALLED WITH APPROPRIATED HEIGHTS. PARKING AREA SHALL MEET A.D.A DIMENSIONS FOR ACCESS AND SURFACE FOR WHEEL CHAIR ACCESS SHALL NOT EXCEED 1:48 SLOPE IN ALL DIRECTIONS. . SEE NOTES FOR CONVENIENCE STORE ACCESSIBILITY.
5. ACCESSIBLE ROUTE TO STORE
6. CURB RAMP
7. ADA BOLLARD SIGNAGE

NOTES FOR CONVENIENCE STORE ACCESSIBLITY

AT LEAST 1 MPD(MULTI PRODUCT DISPENSER) COVERING ALL GRADES OF FUEL MUST BE ACCESSIBLE IN A 30"X48" CLEAR LEVEL FLOOR AREA(CLF).

ALL PUMP CONTROLS SHALL BE < 48"(2010 STANDARD). WINDOW WASHER, PAPER TOWEL DISPENSER, LITERATURE, FIRE EXTINGUISHER, EMERGENCY FUEL STOPS, ETC. BE ACCESSIBLE 30"X48" CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

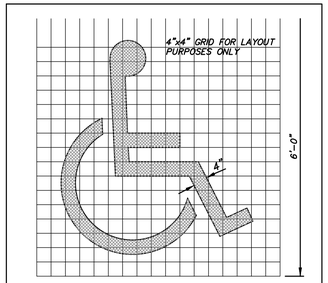
PROVIDE ISA(INDUSTRY STANDARD ARCHITECTURE) AT EACH ACCESSIBLE FUEL POSITION ON FACE OF PUMP.

PROVIDE ISA AT EACH ACCESSIBLE FUELING POSITION VISIBLE TO APPROACHING VEHICLES.

PROVIDE A SIGN AT EACH ACCESSIBLE FUELING POSITION WITH STORE TELEPHONE NUMBER, ADVISING AVAILABLE FUELING ASSISTANCE.

ANY PAY FUNCTION– i.e. AIR/VACUUM etc. ARE REQUIRED TO HAVE AN ACCESSIBLE ROUTE TO STORE ENTRANCE. CONTROLS SHALL BE ACCESSIBLE 30"X48" CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

SCALE: 1" = 40'



PAINTED SYMBOL
FOR ALL ACCESSIBLE AND VAN ACCESSIBLE SPACES

ADA PAINTED SYMBOL DETAIL
NOT TO SCALE

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NOTES:

–REFER TO THE DOCUMENT FROM THE DEPARTMENT OF JUSTICE ON "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN". CONTRACTOR SHALL REFERENCE CURRENT A.D.A. GUIDELINES AND LOCAL REGULATIONS FOR SITE ACCESSIBILITY. IN ALL CASES THE MINIMUM REQUIREMENTS SHALL BE PROVIDED ON SITE TO ENSURE COMPLIANCE TO ALL REGULATIONS.

– KWIK TRIP STANDARD ENTRANCE DOOR IS AUTOMATIC SLIDING DOOR SYSTEM DESIGNED TO COMPLY WITH ALL ACCESS CODES AND LAWS. ENTRANCE DOORS FOR ACCESSIBLE ROUTES WILL HAVE A MINIMUM CLEAR OPENING OF 32"

–STORE FRONTS WILL PROVIDE FLUSH PAVEMENTS ALONG ACCESSIBLE ROUTES WITH PROTECTIVE SECURITY BOLLARDS INDICATED AND SPACED BETWEEN PARKING SURFACES AND BUILDING WALK PER PLAN.

–NO OBJECTS OR DISPLAYS SHOULD PROTRUDE INTO THE MINIMUM CLEAR SPACE OF THE ACCESSIBLE ROUTES TO THE STORE ENTRANCE. THIS WILL INCLUDE SEASONAL DISPLAY VENDING AREAS AS WELL AS OTHER OUTDOOR STORAGE UNITS FOR PROPANE AND ICE, ETC.

–PER A.D.A GUIDELINES– CLEAR WIDTH OF ACCESSIBLE ROUTES SHALL BE 36" AND PERMITTED TO BE REDUCED TO 32" FOR A LENGTH OF 24".

– ACCESS ISLES SERVING WHEEL CHAIR LIFTS OR CHAIR ACCESS FROM VEHICLES ARE REQUIRED TO BE NEARLY LEVEL IN ALL DIRECTIONS TO PROVIDE SAFE TRANSFER OF WHEELCHAIRS TO AND FROM VEHICLES. THE EXCEPTION WOULD BE FOR DRAINAGE. MAXIMUM SLOPE FOR THE ACCESS ISLE IS 1:48. NO CURB RAMPS SHALL BE A PART OF THE ACCESS ISLE.

–IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY WITH THE DESIGNATION OF 1 "VAN ACCESSIBLE' IN EVERY 8 ACCESSIBLE SPACES ON SITE.

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CREATIVITY BEYOND ENGINEERING
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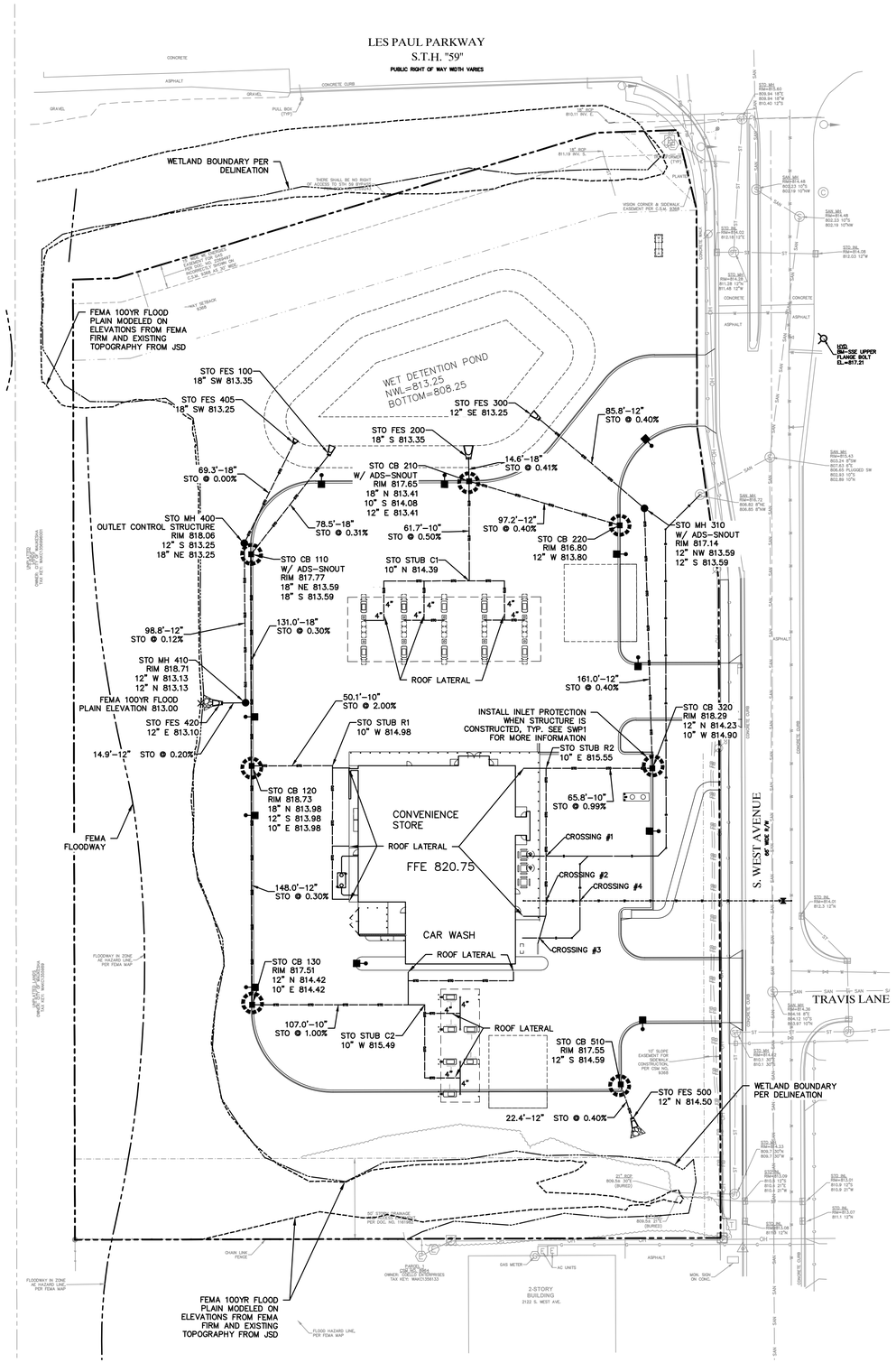
rasmith.com

ACCESSIBLE PLAN
CONVENIENCE STORE #970
2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP2.6



STORM DRAINAGE:

1. UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES AND CATCH BASINS CONFORMING TO ASTM C478, FURNISHED WITH WATER STOP RUBBER GASKETS AND PRECAST BASES. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.

2. ALL JOINTS AND CONNECTIONS TO CATCH BASINS OR MANHOLES SHALL BE WATERTIGHT. USE RESILIENT RUBBER SEALS, WATERSTOP GASKETS, OR APPROVED EQUAL. CEMENT MORTAR JOINTS ARE NOT ALLOWED.

3. INSTALL CATCH BASIN CASTINGS WITH SPECIFIED TOP ELEVATION AT THE FLOW LINE.

4. TESTING: TEST ALL PORTIONS OF STORM SEWER THAT ARE WITHIN 10 FEET OF BUILDINGS, WITHIN 10 FEET OF BURIED WATER, LINES, WITHIN 50 FEET OF WATER WELLS, OR THAT PASS THROUGH SOIL OR WATER IDENTIFIED AS BEING CONTAMINATED. TEST ALL FLEXIBLE STORM SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.

5. PVC PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 4 TO 15-INCHES IN DIAMETER. USE SOLID-CORE, SDR-35, ASTM F679 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 18 TO 27-INCHES IN DIAMETER. JOINTS FOR ALL STORM SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.

6. RCP: REINFORCED CONCRETE PIPE (RCP) AND FITTINGS SHALL CONFORM TO ASTM C76, DESIGN C, WITH CIRCULAR REINFORCING FOR THE CLASS OF PIPE SPECIFIED. USE CLASS IV RCP FOR PIPES 21" AND LARGER. USE CLASS V RCP FOR PIPES 18" AND SMALLER. JOINTS SHALL BE BUREAU OF RECLAMATION TYPE R-4, WITH CONFINED RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C361.

7. USE NEENAH R-3067-R CASTING WITH CURB BOX, OR APPROVED EQUAL, ON CB. USE NEENAH R-2501-C CASTING OR APPROVED EQUAL, ON INL. USE NEENAH FOUNDRY CO. R-1642 CASTING WITH SELF-SEALING, SOLID, TYPE B LID, OR APPROVED EQUAL, ON ALL STORM SEWER MAINTENANCE HOLES AND MANHOLES. COVERS SHALL BEAR THE "STORM SEWER" LABEL.

8. INSTALL DETECTABLE UNDERGROUND MARKING TAPE DIRECTLY ABOVE ALL PVC, POLYETHYLENE, AND OTHER NONCONDUCTIVE UNDERGROUND UTILITIES AT A DEPTH OF 457 MM (18 INCHES) BELOW FINISHED GRADE, UNLESS OTHERWISE INDICATED. BRING THE TAPE TO THE SURFACE AT VARIOUS LOCATIONS IN ORDER TO PROVIDE CONNECTION POINTS FOR LOCATING UNDERGROUND UTILITIES. INSTALL BLUE RHINO TRIVIEW FLEX TEST STATIONS, OR APPROVED EQUAL, WITH BLACK CAPS AT EACH SURFACE LOCATION.

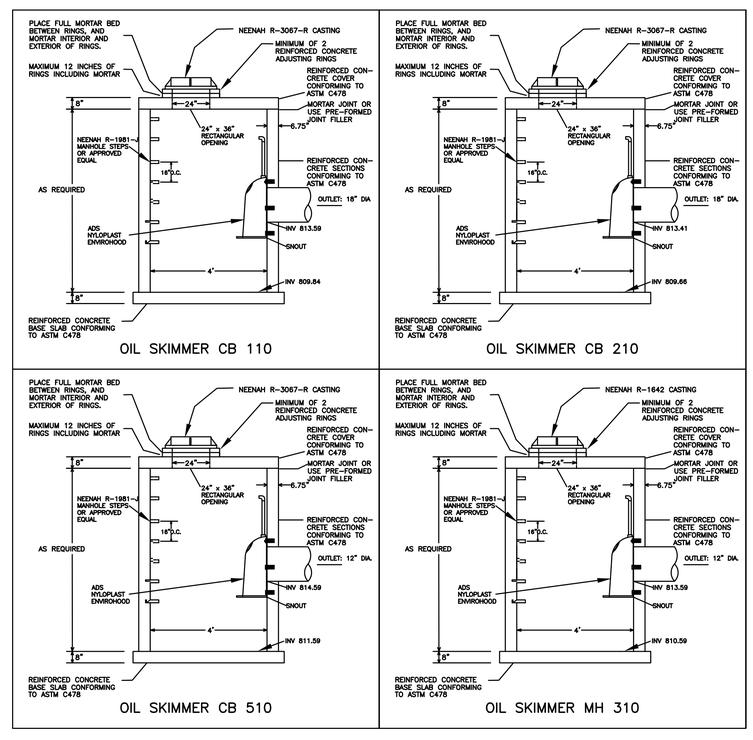
9. TRACER WIRE: LOCATING REQUIREMENTS – A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2R) OF THE STATUTES.

10. CLEANOUTS: INSTALL CLEANOUTS ON ALL ROOF DRAINS. CLEANOUTS SHALL BE INSTALLED AT EVERY T CONNECTION AND BEND. THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 10-INCHES AND UNDER IN SIZE. CLEANOUT SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.

11. THE MINIMUM DEPTH OF COVER FOR BUILDING AND CANOPY ROOF DRAIN LEADERS WITHOUT INSULATION IS 5 FEET. INSULATE ROOF DRAIN LEADERS AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 5 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARDS 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.

12. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST PINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL AND OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE. DO NOT LAY PIPES IN WATER OR WHEN THE TRENCH CONDITIONS ARE UNSUITABLE FOR SUCH WORK.

13. TRENCH SECTION SHALL BE CLASS "C" FOR CONCRETE AND CLASS "B" FOR ALL OTHER MATERIALS.



CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE CITY OF WAUKESHA EROSION CONTROL ORDINANCE, THE WISCONSIN DNR STORMWATER CONSTRUCTION AND POST CONSTRUCTION TECHNICAL STANDARDS, WDNR PERMIT CONDITIONS, AND THESE DOCUMENTS; THE MOST STRINGENT TO APPLY.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

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

R.A.SMITH ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF R.A.SMITH

SCALE: 1" = 40'

40 20 0 40 80

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=80'.

LEGEND

- PROPERTY LINE
- EXISTING CURB
- PROPOSED 18" CURB & GUTTER
- PROPOSED STORM SEWER LINE
- PROPOSED STORM INLET/ MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING STORM SEWER INLETS
- PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN)
- PROPOSED TRANSFORMER
- STORM DRAIN INLET PROTECTION

KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
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STORM SEWER PLAN

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP3

G E N E R A L :

1. COMPLY WITH THE WORK SAFETY PRACTICES SPECIFIED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS. OSHA PROHIBITS ENTRY INTO "CONFINED SPACES," SUCH AS MANHOLES AND INLETS (SEE 29 CFR SECTION 1910.146), WITHOUT UNDERTAKING CERTAIN SPECIFIC PRACTICES AND PROCEDURES. CONSTRUCTION SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR, WHO IS ALSO SOLELY RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCING OF THE CONSTRUCTION OPERATIONS.
2. PERFORM ALL UTILITY WORK IN ACCORDANCE WITH STATE AND VILLAGE REQUIREMENTS.
3. CONNECT TO EXISTING SANITARY SEWER MH'S BY COREDRILLING. CONNECT TO EXISTING STORM SEWER MH'S BY EITHER SAWCUTTING OR COREDRILLING. USE SAWS OR DRILLS THAT PROVIDE WATER TO THE BLADE. MEET ALL CITY STANDARDS AND SPECIFICATIONS FOR THE THE CONNECTION. RECONSTRUCT INVERTS AFTER INSTALLATION. USE WATER STOP GASKETS IN ORDER TO PROVIDE WATERTIGHT SEALS WHEN PENETRATING A STRUCTURE WALL WITH A PIPE. TAKE MEASUREMENTS BEFORE BEGINNING CONSTRUCTION TO ENSURE THAT SERVICE CONNECTIONS DO NOT CUT INTO MAINTENANCE ACCESS STRUCTURE JOINTS OR PIPE BARREL JOINTS. DO NOT ALLOW THE SLURRY PRODUCED BY THIS PROCESS TO BE TRACKED OUTSIDE OF THE IMMEDIATE WORK AREA OR DISCHARGED INTO THE SEWER SYSTEM.
4. PERFORM TRENCH EXCAVATIONS FOR ALL UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF O.S.H.A. 29 CFR, PART 1926, SUBPART P, "EXCAVATIONS AND TRENCHES." (WWW.OSHA.GOV)
5. COORDINATE BUILDING UTILITY CONNECTION LOCATIONS AT 5 FT. OUT FROM THE PROPOSED BUILDING WITH THE WITH THE INTERIOR PLUMBING CONTRACTOR PRIOR TO CONSTRUCTION. VERIFY WATER AND SEWER SERVICE LOCATIONS AND ELEVATIONS WITH THE MECHANICAL ENGINEER PRIOR TO CONSTRUCTION.
6. THE SUBSURFACE UTILITY INFORMATION SHOWN ON THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
7. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE FROM RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THAT ALL EXISTING UTILITIES ARE SHOWN OR, IF SHOWN, EXIST IN THE LOCATIONS INDICATED ON THE PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE FINAL VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES (INCLUDING WATER AND SEWER LINES AND APPURTENANCES). NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
8. CONTACT UTILITY COMPANIES FOR LOCATIONS OF ALL PUBLIC AND PRIVATE UTILITIES WITHIN THE WORK AREA PRIOR TO BEGINNING CONSTRUCTION. CONTACT DIGGER'S HOTLINE AT (414) 259-1181 IN THE MILWAUKEE METRO AREA, OR 1-800-242-8511 ELSEWHERE IN WISCONSIN FOR EXACT LOCATIONS OF EXISTING UTILITIES AT LEAST 72 HOURS (NOT INCLUDING WEEKENDS AND HOLIDAYS) BEFORE BEGINNING ANY CONSTRUCTION. OBTAIN TICKET NUMBER AND MEET WITH REPRESENTATIVES OF THE VARIOUS UTILITIES AT THE SITE. PROVIDE THE OWNER WITH THE TICKET NUMBER INFORMATION. DIGGER'S HOTLINE IS A FREE SERVICE THAT LOCATES MUNICIPAL AND UTILITY COMPANY LINES, BUT DOES NOT LOCATE PRIVATE UTILITY LINES. USE AN INDEPENDENT CONTRACTOR SERVICE OR OTHER MEANS IN ORDER TO OBTAIN LOCATIONS OF PRIVATE UTILITY LINES INCLUDING, BUT NOT LIMITED TO, UNDERGROUND ELECTRIC CABLES, TELEPHONE, TV, AND LAWN SPRINKLER LINES.
9. POTHOLE TO VERIFY THE POSITIONS OF EXISTING UNDERGROUND FACILITIES AT A SUFFICIENT NUMBER OF LOCATIONS IN ORDER TO ASSURE THAT NO CONFLICT WITH THE PROPOSED WORK EXISTS AND THAT SUFFICIENT CLEARANCE IS AVAILABLE.
10. WHERE EXISTING GAS, ELECTRIC, CABLE, OR TELEPHONE UTILITIES CONFLICT WITH THE WORK, COORDINATE THE ABANDONMENT, RELOCATION, OFFSET, OR SUPPORT OF THE EXISTING UTILITIES WITH THE APPROPRIATE LOCAL UTILITY COMPANIES. COORDINATE NEW GAS METER AND GAS LINE INSTALLATION, ELECTRIC METER AND ELECTRIC SERVICE INSTALLATION, CABLE SERVICE, AND TELEPHONE SERVICE INSTALLATION WITH THE LOCAL UTILITY COMPANIES.
11. ARRANGE FOR AND SECURE SUITABLE DISPOSAL AREAS OFF-SITE. DISPOSE OF ALL EXCESS SOIL, WASTE MATERIAL, DEBRIS, AND ALL MATERIALS NOT DESIGNATED FOR SALVAGE. WASTE MATERIAL AND DEBRIS INCLUDES TREES, STUMPS, PIPE, CONCRETE, ASPHALTIC CONCRETE, CANS, OR OTHER WASTE MATERIAL FROM THE CONSTRUCTION OPERATIONS. OBTAIN THE RIGHTS TO ANY WASTE AREA FOR DISPOSAL OF UNSUITABLE OR SURPLUS MATERIAL EITHER SHOWN OR NOT SHOWN ON THE PLANS. ALL WORK IN DISPOSING OF SUCH MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE WORK. ALL DISPOSAL MUST CONFORM TO APPLICABLE SOLID WASTE DISPOSAL PERMIT REGULATIONS. OBTAIN ALL NECESSARY PERMITS AT NO COST TO THE OWNER.
12. STRAIGHT LINE SAW-CUT EXISTING BITUMINOUS OR CONCRETE SURFACING AT THE PERIMETER OF PAVEMENT REMOVAL AREAS. USE SAWS THAT PROVIDE WATER TO THE BLADE. TACK, AND MATCH ALL CONNECTIONS TO EXISTING BITUMINOUS PAVEMENT.
13. RELOCATE OVERHEAD POWER, TELEPHONE, AND CABLE LINES AS REQUIRED.
14. ALL MATERIALS REQUIRED FOR THIS WORK SHALL BE NEW MATERIAL CONFORMING TO THE REQUIREMENTS FOR CLASS, KIND, GRADE, SIZE, QUALITY, AND OTHER DETAILS SPECIFIED HEREIN OR AS SHOWN ON THE PLANS. DO NOT USE RECYCLED OR SALVAGED AGGREGATE, ASPHALTIC PAVEMENT, CRUSHED CONCRETE, OR SCRAP SHINGLES. UNLESS OTHERWISE INDICATED, THE CONTRACTOR SHALL FURNISH ALL REQUIRED MATERIALS.
15. RESTORE THE PUBLIC RIGHT-OF-WAY. REPLACE ANY CONCRETE CURB AND GUTTER, BITUMINOUS PAVEMENT, SIDEWALK, OR VEGETATIVE COVER DAMAGED BY THE CONSTRUCTION ACTIVITY. RESTORE DAMAGED TURF WITH SOD WITHIN THE PUBLIC RIGHT-OF-WAY. THE WORK AREA SHOWN IS GENERAL AND MAY NEED TO BE ADJUSTED IN THE FIELD.
16. ADJUST ALL CURB STOPS, VALVE BOXES, MAINTENANCE HOLE CASTINGS, CATCHBASIN CASTINGS, CLEANOUT COVERS, AND SIMILAR ITEMS TO FINISHED GRADE.
17. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE. DO NOT LAY PIPES IN WATER OR WHEN THE TRENCH CONDITIONS ARE UNSUITABLE FOR SUCH WORK.
18. OBTAIN AND PAY FOR ALL PERMITS, TESTS, INSPECTIONS, ETC. REQUIRED BY AGENCIES THAT HAVE JURISDICTION OVER THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL BONDS, LETTERS OF CREDIT, OR CASH SURETIES RELATED TO THE WORK. EXECUTE AND INSPECT WORK IN ACCORDANCE WITH ALL LOCAL AND STATE CODES, RULES, ORDINANCES, OR REGULATIONS PERTAINING TO THE PARTICULAR TYPE OF WORK INVOLVED.
19. OBTAIN PERMITS FROM THE CITY FOR WORK IN THE PUBLIC RIGHT-OF-WAY.
20. CONSTRUCT SANITARY SEWER, WATERMAIN, AND STORM SEWER UTILITIES IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION, THE LATEST REVISED EDITION, OR CITY OF DELAFIELD SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY.
21. COORDINATE ALL EXISTING UTILITY ABANDONMENT WITH THE CITY OF WAUKESHA. PERFORM ALL WORK IN ACCORDANCE WITH ALL CITY REQUIREMENTS.
22. ALL PROPOSED ON SITE UTILITIES ARE PRIVATE AND WILL BE MAINTAINED ACCORDINGLY.

W A T E R D I S T R I B U T I O N S Y S T E M :

1. BRING ALL SITE UTILITIES TO 5' OUTSIDE OF THE BUILDING LINE WITH THE EXCEPTION OF THE WATER SERVICE. EXTEND WATER SERVICE INTO THE BUILDING AND UP TO THE FLANGE FOR THE WATER METER.
2. SEPARATION OF WATER AND SEWER: PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 8 FEET BETWEEN ALL WATER AND SANITARY SEWER LINES. PROVIDE A MINIMUM SEPARATION OF 18 INCHES AT ALL WATER LINE AND SANITARY SEWER LINE CROSSINGS.
3. WATERMAIN DEPTH: MAINTAIN 6.0 FEET OF COVER OVER THE TOP OF THE WATER LINES TO THE FINISHED GRADE. VERIFY ELEVATION OF PROPOSED AND EXISTING WATER LINES AT ALL UTILITY CROSSINGS. INSTALL THE WATER LINES AT GREATER DEPTHS IN ORDER TO CLEAR STORM SEWERS, SANITARY SEWERS, OR OTHER UTILITIES AS REQUIRED. INCLUDE COSTS TO LOWER WATER LINES IN THE BASE BID.
4. DISINFECTION: DISINFECT ALL COMPLETED WATERMAINS IN ACCORDANCE WITH AWWA STANDARD C651. IF THE TABLET OR CONTINUOUS FEED METHODS ARE USED, DISINFECT USING WITH WATER THAT CONTAINS AT LEAST 50 PPM OF AVAILABLE CHLORINE. RETAIN THE TREATED WATER IN THE PIPELINE FOR AT LEAST 24 HOURS. MEASURE THE CHLORINE RESIDUAL AT THE END OF THE 24 HOUR PERIOD. THE FREE CHLORINE RESIDUAL MUST BE AT LEAST 10 MG/L MEASURED AT ANY POINT IN THE LINE. MEASUREMENT OF THE CHLORINE CONCENTRATION AT REGULAR INTERVALS SHALL BE IN ACCORDANCE WITH STANDARD METHODS, AWWA M-12, OR USING APPROPRIATE CHLORINE TEST KITS.
5. TESTING: PRESSURE TEST AND PERFORM BACTERIOLOGICAL TESTS ON ALL WATER LINES UNDER THE SUPERVISION OF THE CITY PUBLIC WORKS DEPARTMENT. NOTIFY THE CITY AT LEAST 24 WORKING HOURS PRIOR TO ANY TESTING. PRESSURIZE THE WATERLINE TO 1034-KPA (150-PSI) GAUGE PRESSURE (MEASURED AT THE POINT OF LOWEST ELEVATION) BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY MANNER. MAINTAIN THE TEST PRESSURE FOR A MINIMUM OF 2 HOURS. DO NOT ADD WATER TO THE WATERMAIN IN ORDER TO MAINTAIN THE REQUIRED PRESSURE DURING THE WATER MAIN PRESSURE TESTING. THE TEST SECTION OF PIPE IS ACCEPTABLE WITH A PRESSURE DROP OF 14 KPA (2 PSI) OR LESS.
6. USE MECHANICAL JOINT RESTRAINT DEVICES FOR JOINT RESTRAINT ON ALL WATERMAIN BENDS HAVING A VERTICAL OR HORIZONTAL DEFLECTION OF 22-1/2 DEGREES OR GREATER, ALL VALVES, STUBS, EXTENSIONS, TEES, CROSSES, PLUGS, ALL HYDRANT VALVES, AND ALL HYDRANTS IN ACCORDANCE WITH CITY REQUIREMENTS. USE "SERIES 1100 MEGALUG" MANUFACTURED BY EBAA IRON INC., EASTLAND, TEXAS, OR APPROVED EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR RESTRAINT ON DUCTILE IRON PIPE.
7. AT ALL VALVE LOCATIONS WHICH REQUIRE A 12" OR SMALLER VALVE, INSTALL GATE VALVES WHICH ARE OF THE COMPRESSION RESILIENT SEATED (CRS) TYPE. USE AMERICAN FLOW CONTROL'S SERIES 2500 DUCTILE IRON RESILIENT WEDGE GATE VALVE, OR APPROVED EQUAL. GATE VALVES SHALL CONFORM TO AWWA C509. INSTALL CAST IRON VALVE BOXES CONFORMING TO ASTM A48 AT EACH VALVE LOCATION. VALVE BOXES SHALL BE THE THREE-PIECE TYPE WITH 5-1/4" SHAFTS. USE TYLER 6860-G WITH NO. 6 BASE, OR EQUIVALENT. VALVE BOXES SHALL HAVE AT LEAST 6" OF ADJUSTMENT ABOVE AND BELOW FINISHED GRADE. DROP COVERS ON VALVE BOXES SHALL BE ROUND AND BEAR THE WORD "WATER" CAST ON THE TOP. USE TYLER 6860-G "STAYPUT" COVERS WITH EXTENDED SKIRT, OR EQUIVALENT.
8. USE MUELLER H 10300 OR FORD EM 2 7057, OR APPROVED EQUAL, AT ALL CURB STOP LOCATIONS. STATIONARY ROD IS REQUIRED ON ALL CURB STOPS.
9. POLYVINYL CHLORIDE (PVC) BUILDING WATER SERVICES: ASTM D2241 OR ASTM D1785; PRESSURE RATED FOR WATER.
10. POLYVINYL CHLORIDE (PVC) WATERMAIN: USE AWWA C900 FOR ALL PVC WATERMAIN FURNISHED WITH INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS; MINIMUM PRESSURE CLASS 150; DIMENSION RATIO NOT GREATER THAN 18; LAYING LENGTH 20 FEET. USE EBAA IRON, INC., 'SERIES 2000 PV MEGALUG,'OR APPROVED EQUAL FOR RESTRAINT ON C900 PVC WATERMAIN. LAY TRACE WIRE WITH ALL C900 PVC WATERMAIN.
11. TRACER WIRE: LOCATING REQUIREMENTS – A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THE WISCONSIN STATUTES 182.0175(2R) AND THE WISCONSIN DSPS 382.30(11)(H).
12. TRENCH SECTION SHALL CONFORM TO SECTION 4.3.C, FILE NO. 38 OF THE STANDARD SPECIFICATIONS. SAND OR STONE CHIP BEDDING MATERIAL IS REQUIRED.

S A N I T A R Y S E W E R :

1. PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 (OR APPROVED EQUAL) POLYVINYL CHLORIDE (PVC) PLASTIC PIPE FOR ALL DESIGNATED PVC SANITARY SEWER SERVICES. JOINTS FOR ALL SANITARY SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2564. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.
2. CLEANOUTS: INSTALL CLEANOUTS ON ALL SANITARY SEWER SERVICES. THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 4-INCH AND OVER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE. INCLUDE FROST SLEEVES AND CONCRETE FRAME AND PIPE SUPPORT. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.
3. TESTING: PRESSURE TEST ALL SANITARY SEWER LINES. TEST ALL FLEXIBLE SANITARY SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.
4. UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES CONFORMING TO ASTM C478, FURNISHED WITH PRECAST BASES. SANITARY SEWER MAINTENANCE HOLES SHALL BE SUPPLIED WITH PRE-FORMED INVERTS AND FLEXIBLE NEOPRENE SLEEVE CONNECTIONS FOR ALL LATERAL LINES 375 MM (15 INCHES) IN DIAMETER OR LESS, UNLESS OTHERWISE INDICATED. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.
5. INSTALL FLEXIBLE WATERTIGHT FRAME/CHIMNEY SEALS ON ALL SANITARY SEWER MAINTENANCE HOLES. USE EITHER MANUFACTURED MAINTENANCE HOLE FRAME/CHIMNEY SEALS OR ELASTOMERIC WATERPROOFING FRAME/CHIMNEY SEALS.
6. USE NEENAH FOUNDRY CO. R-1642 CASTING WITH SELF-SEALING, SOLID, TYPE B LID, OR APPROVED EQUAL, ON ALL SANITARY SEWER MAINTENANCE HOLES. COVERS SHALL BEAR THE "SANITARY SEWER" LABEL.
7. TRACER WIRE: LOCATING REQUIREMENTS – A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THE WISCONSIN STATUTES 182.0175(2R) AND THE WISCONSIN DSPS 382.30(11)(H).
8. TRENCH SECTION SHALL BE CLASS "B" BEDDING. CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. PREFABRICATED WYE CONNECTIONS ARE REQUIRED FOR SANITARY LATERALS

LEGEND

- PROPERTY LINE
- PROPOSED 18" CURB & GUTTER
- PROPOSED SANITARY SEWER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED STORM CATCH BASIN/ MANHOLE
- PROPOSED WATER MAIN
- PROPOSED HYDRANT
- PROPOSED VALVE
- PROPOSED TELEPHONE
- PROPOSED GAS LINE
- PROPOSED ELECTRICAL LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATER MAIN
- EXISTING ELECTRICAL LINE
- EXISTING OVERHEAD WIRING
- PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN)
- PROPOSED TRANSFORMER
- EXISTING TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISITNG GAS LINE
- EXISTING HYDRANT
- EXISTING GATE VALVE
- EXISTING STORM SEWER MANHOLE
- EXISTING STORM SEWER INLETS
- EXISTING SANITARY SEWER MANHOLE
- EXISTING LIGHT POLES
- EXISTING ELEC. AND TELE. PEDESTALS
- EXISTING GAS METER AND VALVES

SCALE: 1" = 20'

10 5 10 5 0 20 40

CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE CITY OF WAUKESHA EROSION CONTROL ORDINANCE, THE WISCONSIN DNR STORMWATER CONSTRUCTION AND POST CONSTRUCTION TECHNICAL STANDARDS, WDNR PERMIT CONDITIONS, AND THESE DOCUMENTS; THE MOST STRINGENT TO APPLY.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

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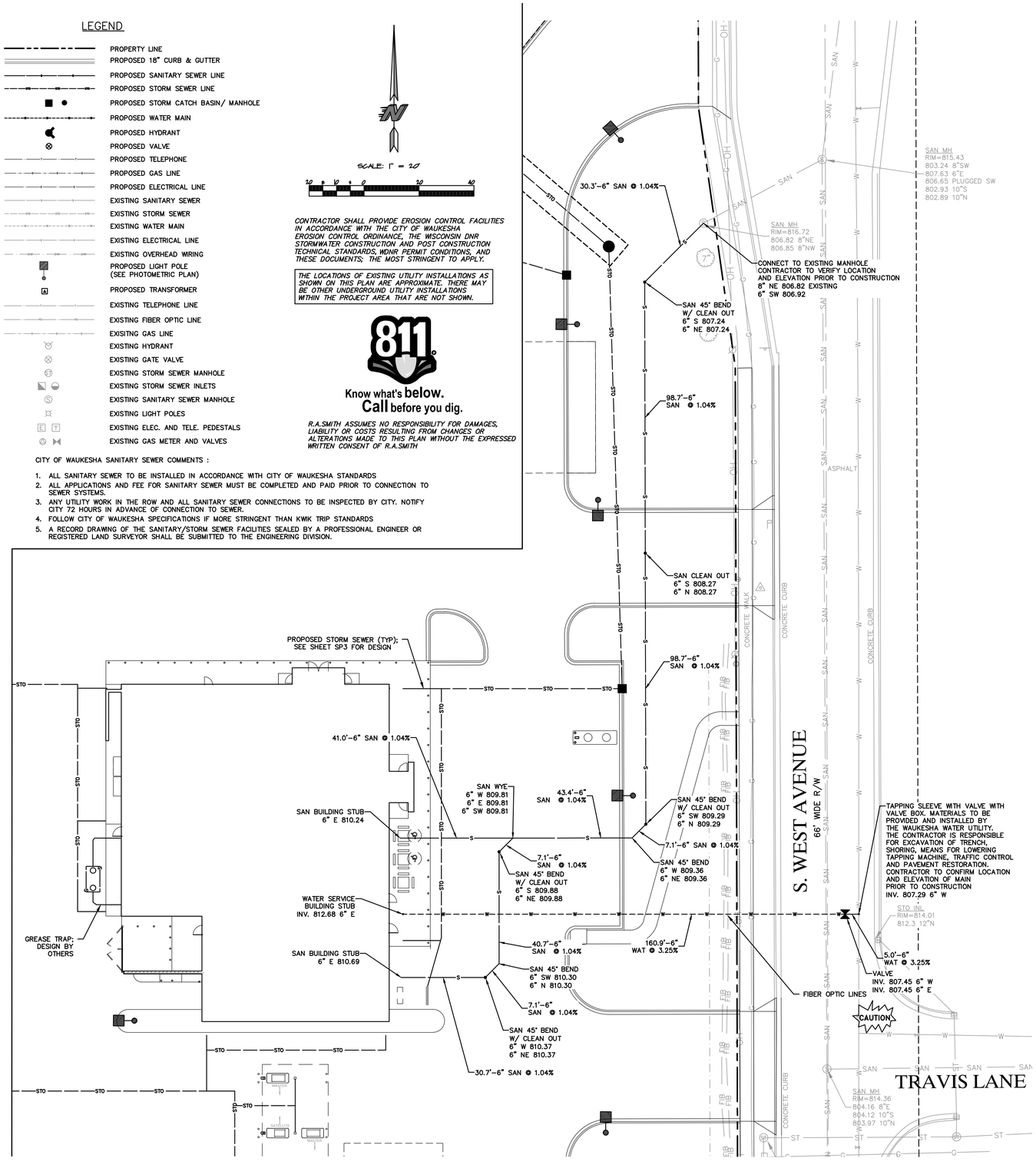
CITY OF WAUKESHA SANITARY SEWER COMMENTS :

1. ALL SANITARY SEWER TO BE INSTALLED IN ACCORDANCE WITH CITY OF WAUKESHA STANDARDS
2. ALL APPLICATIONS AND FEE FOR SANITARY SEWER MUST BE COMPLETED AND PAID PRIOR TO CONNECTION TO SEWER SYSTEMS.
3. ANY UTILITY WORK IN THE ROW AND ALL SANITARY SEWER CONNECTIONS TO BE INSPECTED BY CITY. NOTIFY CITY 72 HOURS IN ADVANCE OF CONNECTION TO SEWER.
4. FOLLOW CITY OF WAUKESHA SPECIFICATIONS IF MORE STRINGENT THAN KWIK TRIP STANDARDS
5. A RECORD DRAWING OF THE SANITARY/STORM SEWER FACILITIES SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED LAND SURVEYOR SHALL BE SUBMITTED TO THE ENGINEERING DIVISION.



KWIK TRIP

KWIK STAR

KWIK TRIP, Inc.
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Brookfield, WI 53005-5938
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rasmith.com

UTILITY PLAN

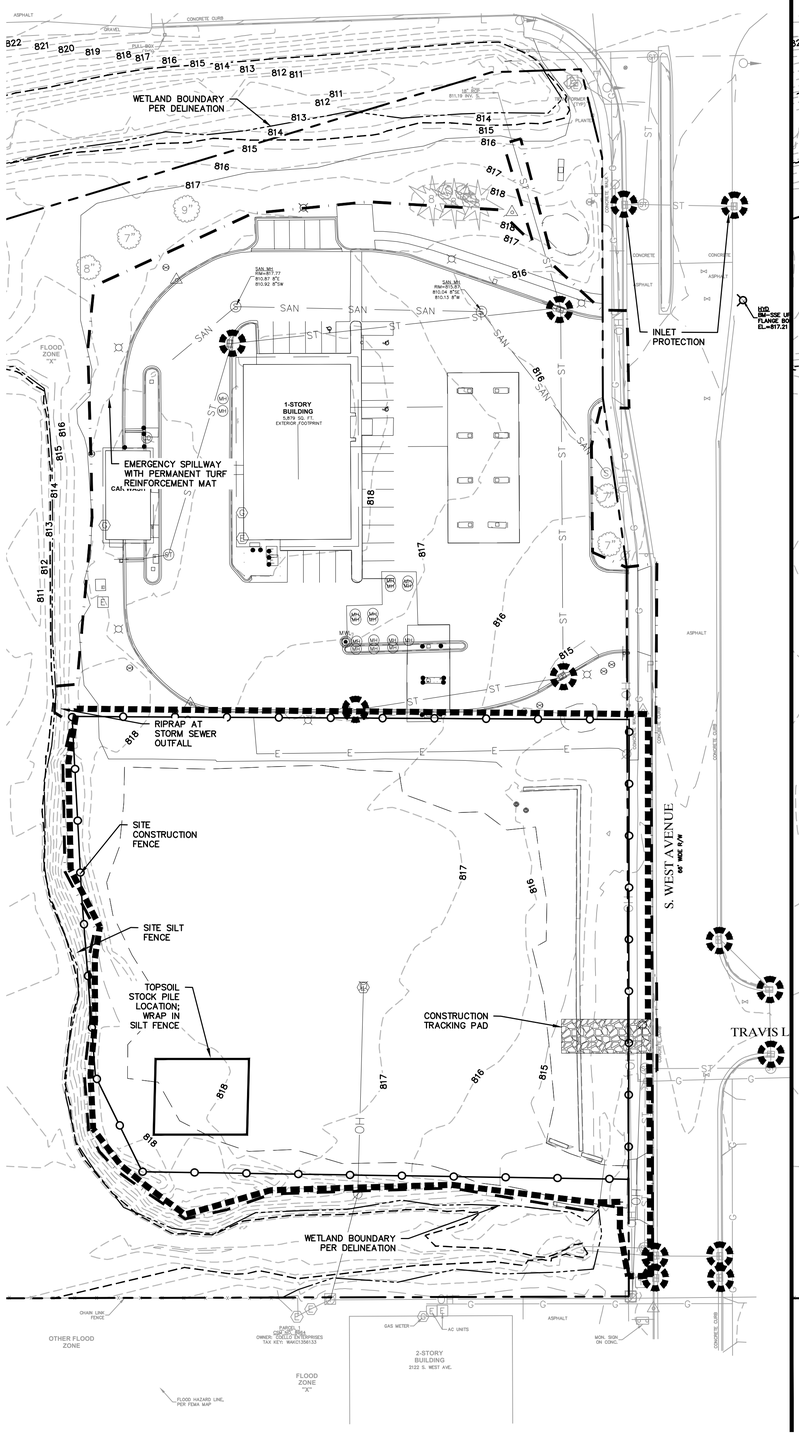
CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

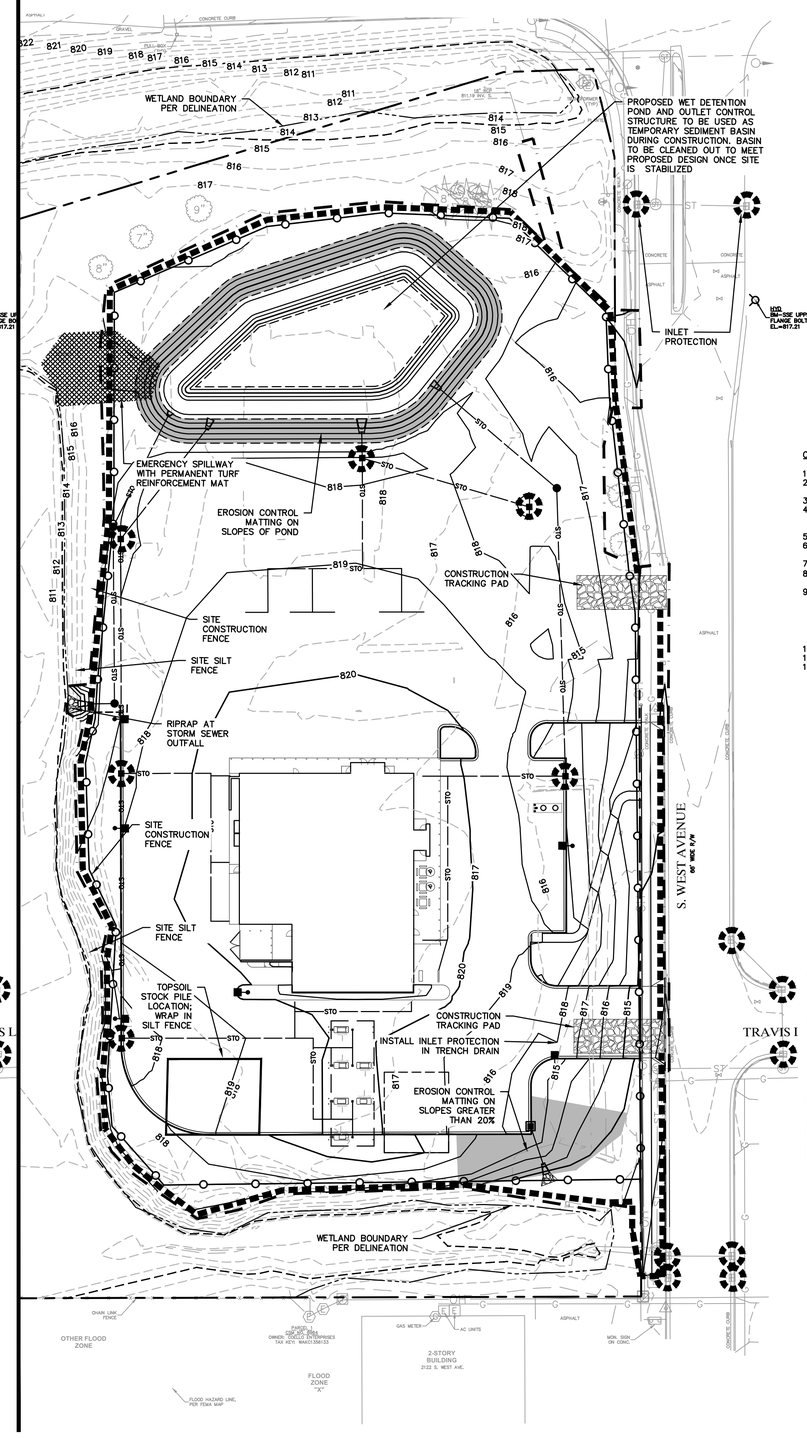
#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SP4

EROSION CONTROL PHASE 1 – SOUTH CONSTRUCTION



EROSION CONTROL PHASE 2 – NORTH CONSTRUCTION



SCALE: 1" = 40'

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=80'.

LEGEND

- LAND DISTURBANCE LIMITS: 3.86 ACRES
- PROPOSED SILT FENCE
- PROPOSED CONSTRUCTION FENCE
- STORM DRAIN INLET PROTECTION
- STONE TRACKING PAD
- TEMPORARY EROSION CONTROL MATTING

CONSTRUCTION SEQUENCE

1. INSTALL SILT FENCE FOR PHASE 1 CONSTRUCTION.
2. INSTALL CONSTRUCTION ENTRANCE FOR PHASE 1. THIS IS THE ONLY EXIT TO BE USED FOR ALL CONSTRUCTION ACTIVITIES. CONTRACTOR MAY ADJUST LOCATIONS TO FACILITATE CONSTRUCTION PHASING.
3. INSTALL STORM DRAIN INLET PROTECTION ON EXISTING INDICATED STORM INLETS.
4. STRIP TOPSOIL AND GRADE SITE IN INCREMENTS APPROPRIATE TO WORK WHILE MAINTAINING SEDIMENTATION AND EROSION CONTROL PRACTICES IN CONFORMANCE WITH LOCAL AND STATE GUIDELINES. TEMPORARY DIVERSION SWALES MAY BE NEEDED TO PROMOTE DRAINAGE TOWARDS TEMPORARY SEDIMENT BASINS.
5. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL BMP's WHEN SITE WORK AND GRADING ALLOWS.
6. CONSTRUCT UTILITIES AND INSTALL ADDITIONAL STORM DRAIN INLET PROTECTION TO INLETS AS SOON AS THEY ARE CONSTRUCTED.
7. PREPARE ROADWAY AND PARKING LOT SUBGRADE. INSTALL CURB AND GUTTER AND PAVE SITE.
8. WHEN PHASE 2 TAKES PLACE BASED ON THE CONTRACTOR'S GENERAL PHASING PLAN, INSTALL THE ADDITIONAL SILT FENCE AND CONSTRUCTION ENTRANCE.
9. CONSTRUCT WET DETENTION POND. WET DETENTION PONDS SHALL BE UNDERCUT BY 2 FEET AND LINED WITH A 2 FOOT LAYER OF CLAY. IF ACCEPTABLE MATERIAL IS AVAILABLE ONSITE, IT MAY BE USED. IF ACCEPTABLE MATERIAL IS NOT AVAILABLE ONSITE, IT SHALL BE IMPORTED. THE CONTRACTOR SHALL CONSULT WITH THE GEOTECHNICAL ENGINEER TO DETERMINE WHETHER MATERIAL IS ACCEPTABLE TO LINE THE PONDS. WET DETENTION POND TO BE USED AS TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. CONSTRUCT TEMPORARY OUTLET STRUCTURE AND PIPE.
10. APPLY SEED FERTILIZER AND MULCH TO LANDSCAPE LAWN AREAS AS SOON AS POSSIBLE.
11. FLUSH STORM SEWER.
12. CONTRACTOR SHALL REMOVE ALL REMAINING TEMPORARY EROSION CONTROL BMPs WHEN DISTURBED AREAS ARE STABILIZED AND NO LONGER SUSCEPTIBLE TO EROSION

ESTIMATED EROSION CONTROL QUANTITIES
(ACTUAL QUANTITIES SUBJECT TO CHANGE)

ITEM	QUANTITY
CONSTRUCTION ENTRANCE	2
STORM DRAIN INLET PROTECTION	19 (PLUS TWO TRENCH DRAINS)
EROSION CONTROL MAT	1029 S.Y.
RIP RAP	AS NEEDED
SILT FENCE	2000 L.F.
STRAW WATTLE	AS NEEDED

NOTE: FOR MAINTENANCE PURPOSES, CONTRACTOR SHALL MAINTAIN EROSION CONTROL PER DNR REQUIREMENTS THROUGHOUT ALL PHASES OF THE PROJECTS CONSTRUCTION. COST FOR MAINTENANCE SHALL BE INCLUDED AND CONSIDERED INCIDENTAL TO BID PRICE

PROJECT DATA

LAND DISTURBANCE TIME: APPROXIMATELY 7 MONTHS

–ALL SILT FENCE MUST BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE CITY PRIOR TO ANY SITE WORK.

–SITE EROSION CONTROL MEASURES MUST BE IN PLACE AT ALL TIMES. SHOULD DEVICES BE REMOVED FOR WORK ACCESS, THEY SHALL BE REINSTALLED AT THE END OF EACH WORK DAY UNTIL PAVEMENTS HAVE BEEN INSTALLED AND ALL LANDSCAPE AREAS HAVE BEEN MULCHED AND SODDED. SEEDED AREAS MUST EXHIBIT MINIMUM OF 70% SOIL COVERAGE.

–REFER TO THE SWPPP PLAN NOTES AND DETAIL SHEETS SWPP 2–4 FOR MORE INFORMATION.

–THE NEAREST BODY OF WATER IS PEBBLE BROOK AND THIS SITE IS WITHIN THE EAGLE CREEK–FOX RIVER BASIN.

–THE SITE IS ALMOST ENTIRELY CLASSIFIED BY USGS WEB SOIL SURVEY AS SILT LOAM SOILS (HYDRAULIC SOIL GROUP D).

CONTACT BRADFORD FRY, P.E.
KWIK TRIP, INC
PO BOX 2107
LACROSSE, WI 54602
608–793–6414

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EROSION CONTROL PLAN

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
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PROJ. NO.	3190495
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GENERAL STORMWATER POLLUTION PREVENTION:

APPLY FOR AND OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION ACTIVITY.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): THE SWPPP INCLUDES THIS NARRATIVE, PLAN SHEETS SP1–SP4, SWP1–SWP4 AND THE STORMWATER MANAGEMENT CALCULATIONS. KEEP A COPY OF THE SWPPP, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS AT THE SITE DURING THE CONSTRUCTION. DURING THE CONSTRUCTION PROCESS THE SWPP WILL HAVE TO BE AMENDED FOR ALL CHANGES PERFORMED BY THE CONTRACTOR. THE OWNER SHALL BE AWARE OF THE AMENDMENTS PRIOR TO CHANGES MADE TO THE SWPP PLAN. ALL NOTES, PHOTOGRAPHS, RECORDED DATES, SKETCHES, REFERENCES, AND DIAGRAMS WILL HAVE TO BE RECORDED AND MADE AVAILABLE AS PART OF THE SWPP PERMIT.

INDIVIDUAL(S) PREPARING THE SWPPP FOR THE PROJECT, OVERSEEING IMPLEMENTATION OF THE SWPPP, REVISING AND AMENDING THE SWPPP, AND AT LEAST ONE INDIVIDUAL ON THE PROJECT PERFORMING INSTALLATION, INSPECTION, MAINTENANCE, AND REPAIRS OF BMP'S MUST BE TRAINED. THE TRAINING MUST BE DONE BY A LOCAL, STATE, FEDERAL AGENCIES; PROFESSIONAL ORGANIZATION; OR OTHER ENTITITES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, OR PERMANENT STORMWATER MANAGEMENT.

RESPONSIBLE PARTIES: THE CONTRACTOR MUST DESIGNATE A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPS WHO WILL OVERSEE THE IMPLEMENTATION OF THE SWPPP, AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE AND DURING CONSTRUCTION.

THE OWNER IS RESPONSIBLE FOR IDENTIFYING WHO WILL HAVE RESPONSIBILITY FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEMS.

OWNER CONTACT:

NAME: BRADFORD FRY, P.E.
COMPANY: KWIK TRIP INC.
ADDRESS: KWIK TRIP, INC. – STORE ENGINEERING
1626 OAK STREET, P.O. BOX 2107
LA CROSSE, WI 54601–2107
TELEPHONE: (608) 793–6414

SITE INVESTIGATION, INSTALLATION, IMPLEMENTATION :

1. PRIOR TO ANY WORK, CONTRACTOR SHALL VISIT THE SITE, DOCUMENT EXISTING CONDITIONS AS NECESSARY(PHOTOS, NOTES, ETC) AND NOTE EXISTING DRAINAGE PATTERNS ON AND OFF SITE THAT ARE RELATED TO THE PROJECT. THESE NOTES SHALL BE PART OF THE SWPP.

2. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING SILT FENCE, ROCK CONSTRUCTION ENTRANCE(S), EROSION CONTROL BERMS, ROCK FILTERS, SILT SACKS, ROCK /EARTH BERMS, AND SEDIMENTATION BASINS. PROTECT ALL RECEIVING WATERS, CATCH BASINS, DITCHES, INLETS ETC. IN AND AROUND THE SITE. ALL PROTECTIVE AND PREVENTATIVE MEASURES MUST BE IN PLACE AND INSPECTED PRIOR TO BEGINNING SITE CLEARING, GRADING, OR OTHER LAND–DISTURBING ACTIVITY.

3. PRIOR TO BEGINNING SITE CLEARING AND GRADING, PROTECT ALL STORM SEWER INLETS THAT RECEIVE RUNOFF FROM DISTURBED AREAS. IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING THE DOWNSTREAM STORM SEWER SYSTEM, SEAL ALL STORM SEWER INLETS THAT ARE NOT NEEDED FOR SITE DRAINAGE DURING CONSTRUCTION. PROTECT ALL OTHER STORM SEWER INLETS BY INSTALLING SEDIMENT CONTROL DEVICES, SUCH AS SILT SACKS, OR ROCKED FILTRATION LOGS/WIERS. STRAW BALES OR FABRIC UNDER THE GRATES ARE NOT ACCEPTABLE FORMS OF INLET PROTECTION. PROTECT NEW STORM SEWER INLETS AS THEY ARE COMPLETED. MAINTAIN STORM SEWER INLET PROTECTION IN PLACE UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLETS ARE STABILIZED.

4. BEFORE BEGINNING CONSTRUCTION, INSTALL A TEMPORARY ROCK CONSTRUCTION ENTRANCE AT EACH POINT WHERE VEHICLES EXIT THE CONSTRUCTION SITE WHEN AT ALL POSSIBLE CONTRACTOR SHALL DESIGNATE ONLY ONE ACCESS POINT FOR VEHICLES ENTERING AND EXITING THE SITE. THE ROCK ON THE ENTRANCE WILL HAVE TO BE INSPECTED DAILY AND REPLACED OR ROCK SUPPLEMENTED BY THE CONTRACTOR WHEN OVER 50% OF THE VOIDS IN THE ROCK ARE FILLED. A CLEANING STATION SHOULD BE MADE AVAILABLE TO DRIVERS AND VISIBLY SIGNED AS SUCH. PROVIDE SHOVELS, BROOMS AND/OR HOSE WITH A WASH OUT AREA SO SOILS CAN BE REMOVED FROM VEHICLES ON SITE.

5. AVOID ENTIRE REMOVAL OF TREES AND SURFACE VEGETATION ALL AT ONCE WHENEVER POSSIBLE AS THIS LIMITS THE AMOUNT OF SITE SUSCEPTIBLE TO EROSION. SCHEDULE CONSTRUCTION ZONES AND NOTE THIS ON THE SWPP PLAN IN ORDER TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL AT ANY GIVEN TIME. UTILIZE VEGETATION REMOVED BY ON SITE GRINDING AND MULCHING AND USING THIS MATERIAL TO PROTECT THE SOIL FROM EROSION.

6. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, COMPLETE PERMANENT OR TEMPORARY STABILIZATION AGAINST EROSION DUE TO RAIN, WIND, AND RUNNING WATER WITHIN 14 CALENDAR DAYS ON ALL DISTURBED OR GRADED AREAS. THIS REQUIREMENT DOES NOT APPLY TO THOSE AREAS THAT ARE CURRENTLY BEING USED FOR MATERIAL STORAGE ON A DAILY BASIS OR FOR THOSE AREAS ON WHICH GRADING, SITE BUILDING, OR OTHER CONSTRUCTION ACTIVITIES ARE ACTIVELY UNDERWAY. PROVIDE TEMPORARY COVER ON ALL STACKED TOPSOIL PILES, AND OTHER AREAS OF STOCKPILED EXCAVATED MATERIAL IN ORDER TO PREVENT SOIL EROSION AND RAPID RUNOFF DURING THE CONSTRUCTION PERIOD. STOCKPILES CAN BE MULCHED,COVERED WITH POLY OR FABRIC, AND OR SEEDED DURING PROLONGED EXPOSURE. PROLONGED PERIODS OF OPEN, BARE EARTH WITHOUT GRASS COVER WILL NOT BE PERMITTED. STABILIZE ALL DISTURBED GREENSPACE AREAS WITH A MINIMUM OF 4" TOPSOIL IMMEDIATELY AFTER FINAL SUBGRADE COMPLETION. SEED AND MULCH, OR SOD AND PROTECT THESE AREAS WITHIN 48 HOURS AFTER COMPLETION OF FINAL GRADING WORK (WEATHER PERMITTING). STABILIZE ALL DISTURBED AREAS TO BE PAVED USING EARLY APPLICATION OF GRAVEL BASE. STABILIZE THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT CONVEYS WATER FROM THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE CONSTRUCTION SITE, WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR WITHIN 200 FEET FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZE TEMPORARY OR PERMANENT DRAINAGE DITCHES WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PROTECT OUTFALLS MINIMUM OF 200FEET DOWN STREAM AND TO THE SIDE OF THE DISCHARGE POINT. ADDITIONAL SETTLING "POTS" ACHIEVED BY FILTER LOGS OR FILTERED STICK BALES STAKED IN THE CHANNEL WILL DISSIPATE THE WATER ENERGY. PROVIDE PIPE OUTLETS WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

7. RECEIVING WATERS – IT IS THE CONTRACTORS RESPONSIBILITY TO INSPECT THE SITE DISCHARGE POINT AS WELL AS DOWNSTREAM TO THE RECEIVING BODY OF WATER(POND, LAKE, STREAM, ETC.) ON A REGULAR BASIS INCLUDING AFTER EACH STORM EVENT AND DOCUMENT IF ANY DIFFERENCES OR CHANGES IN NORMAL IN DISCHARGE AND IF MATERIAL IS LEAVING THE CONSTRUCTION SITE. IF SO IT SHALL BE DOCUMENTED AND REMOVED IMMEDIATELY.

NOTE: ALL EROSION AND SEDIMENT CONTROL DEVICES WILL BE CHECKED BY THE CONTRACTOR AFTER EACH STORM EVENT AND BE MAINTAINED, OR IMPROVED UPON AFTER EVERY STORM EVENT TO ENSURE ADEQUATE PERFORMANCE.

POLLUTION CONTROL:

1. DESIGNATE A CONCRETE WASH–OUT AND TRUCK WASH AREA:
MAKE IT VISIBLE IN THE FIELD TO VEHICLE OPERATORS AND NOTE THIS ON THE SWPP PLAN.

A. WHEN WASHOUTS OCCUR ON THE SITE, CONCRETE WASHOUT WATER MUST BE CONTAINED IN A LEAK–PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. LIQUID AND SOLID WASTES MAY NOT TOUCH THE GROUND AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS.

B. ON SITES WHERE CONCRETE WASHOUT AREAS ARE NOT FEASIBLE AS SHOWN ON THE DETAIL SHEET, ABOVE GROUND METHODS AND/OR OFF–SITE METHODS CAN BE UTILIZED AS APPROVED BY OWNER.

C. CONCRETE WASHOUT MAY BE PROVIDED OFF–SITE BY CONCRETE CONTRACTOR OR CONCRETE SUPPLIER, AT AN APPROVED WASHOUT DISPOSAL AREA. CONCRETE SUPPLIER MAY PROVIDE CONCRETE WASHOUT AREAS ON–BOARD THEIR TRANSPORTS FOR DISPOSAL OFF–SITE. CONCRETE CONTRACTOR SHALL VERIFY WITH SUPPLIER IN REGARDS TO PROVIDED CONCRETE WASHOUT AREAS ON AND OFF–SITE, AS NECESSARY.

D. LIMIT EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES TO A DEFINED AREA PREFERABLY BEFORE THE CONSTRUCTION ACCESS/EXIT POINT. WASH VEHICLES ONLY ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. CONTAIN RUNOFF AND PROPERLY DISPOSE OF WASTE. ENGINE DEGREASING IS PROHIBITED.

2. SOLID WASTE: PROPERLY DISPOSE OF COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS, AND OTHER WASTES IN COMPLIANCE WITH STATE REQUIREMENTS.

3. HAZARDOUS MATERIALS: PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE DEBRIS, CLEANING WASTES, OIL, GASOLINE, PAINT, WASTEWATER, TOXIC MATERIALS, AND HAZARDOUS MATERIALS) OFF–SITE. DO NOT ALLOW WASTE AND UNUSED BUILDING MATERIALS TO BE CARRIED BY RUNOFF INTO A RECEIVING CHANNEL OR STORM SEWER SYSTEM. PROPERLY STORE OIL, GASOLINE, PAINT, AND OTHER HAZARDOUS MATERIALS IN ORDER TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGE. INCLUDE SECONDARY CONTAINMENT. RESTRICT ACCESS TO STORAGE AREAS IN ORDER TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH REGULATIONS.

4. MACHINERY: AND MECHANICALIZED EQUIPMENT THAT LEAKS WASTE SHALL HAVE A PROTECTIVE BARRIER OR CONTAINMENT UNDER THE DEVICE ADEQUATE TO CONTAIN THE WASTE. PROPERLY DISPOSE OF THE WASTE.

5. EMERGENCY SPILL STATION: CONTRACTOR SHALL LOCATE AND SIGN AN EMERGENCY SPILL STATION THAT HAS NECESSARY CONTAINMENT OR CLEANUP DEVICES FOR ALL WORKERS TO ACCESS.

EROSION CONTROL :

APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.

CONTRACTOR SHALL UTILIZE COARSELY GROUND WOOD AND TREE MULCHES TO COVER EXPOSED SOILS. MULCHES SHALL BE SPORED ON SITE TO SUPPLEMENT AND USE IN PROBLEM AREAS DURING ALL PHASES OF THE CONSTRUCTION PROJECT.

CONTRACTOR SHALL USES STAR TACK OR OTHER ORGANIC SUBSTANCES IN SITUATIONS TO PREVENT SOIL FROM ERODING AWAY BY WIND OR RAIN.

WHENEVER POSSIBLE CONTRACTOR SHALL GRADE AREAS OF SOIL TO LIMIT POTENTIAL OF EROSION, TO INCLUDE TRACKING PERPENDICULAR TO FALL LINE OF GRADES AS WELL AS DIVERTING WATER FLOWS FROM PROBLEMATIC AREAS ON THE SITE.

SEEDING, FIBER BLANKETS, POLY/TARPS OR COVER MULCHES, DISKED MULCHES AND COMPOST CAN BE USED TO COVER TEMPORARILY EXPOSED AREAS FROM WIND AND RAIN. OTHER METHODS BY THE CONTRACTOR SHALL BE DOCUMENTED IN THE SWPP.

SEDIMENT CONTROL:

INLET SEDIMENT CONTROL PROTECTION DEVICES:
THE FOLLOWING ARE APPROVED INLET SEDIMENT CONTROL DEVICES:

A. ROAD DRAIN TOP SLAB MODEL RD 23 (FITS ROUGH OPENING FOR 2'X3' INLET), ROAD DRAIN TOP SLAB MODEL RD 27 (FITS ROUGH OPENING FOR 27" INLET), OR ROAD DRAIN TOP SLAB MODEL CG 3067 (FITS NEENAH CASTING WITH 35–1/4"X17–3/4" DIMENSIONS) MANUFACTURED BY WIMCO, 799 THEIS DRIVE, SHAKOPEE, MN, 55379, PHONE (952) 233–3055. OR APPROVED EQUAL

B. SILT SACK MANUFACTURED BY ACF ENVIRONMENTAL, 2831 CARDWELL ROAD, RICHMOND, VA, 23234, PHONE (800) 448–3636. OR APPROVED EQUAL

C. INFRASAFE SEDIMENT CONTROL BARRIER. INSTALL GEOTEXTILE SOCK ON THE OUTSIDE OF THE BARRIER IN ORDER TO TRAP ADDITIONAL FINES. STANDARD FRAMES ARE AVAILABLE TO FIT 24" TO 30" DIAMETER AND 2'X3' OPENINGS. DISTRIBUTED BY ROYAL ENTERPRISES AMERICA, 30622 FOREST BOULEVARD, STACY, MN, 55079, PHONE (651) 462–2130. OR APPROVED EQUAL

D. RIDGE BAG ROCK LOG. USE ROCK LOGS ONLY FOR CURB INLETS AFTER PAVEMENT IS IN PLACE. MANUFACTURED BY RED BARN RIDGE, 3135 COUNTY ROAD 136, SAINT CLOUD, MN, 35301, PHONE (320) 253–3744. OR APPROVED EQUAL

E. INFLATABLE DRAIN PLUGS BY INTERSTATE PRODUCTS WWW.INTERSTATEPRODUCTS.COM OR APPROVED EQUAL

RIPRAP:
PLACE A 450 MM (18 INCH) THICK LAYER OF RIPRAP ONTO A 225 MM (9 INCH) THICK LAYER OF GRANULAR FILTER MATERIAL AT LOCATIONS INDICATED ON THE PLAN IN ACCORDANCE WITH WIDOT SPECIFICATION 606. INSTALL TWO LAYERS OF MEDIUM DUTY GEOTEXTILE FABRIC (WIDOT HR, SECTION 645.3.7) BENEATH THE GRANULAR FILTER MATERIAL. AT PIPE OUTFALLS CONFIGURE THE INSTALLATION AS SHOWN ON DETAIL SHEET FOR THE SIZE OF PIPE INDICATED AND EXTEND THE GEOTEXTILE FABRIC UNDER THE CULVERT APRON A MINIMUM OF 3 FEET. FOR PIPE SIZES SMALLER THAN 300 MM (12 INCH) DIAMETER, THE MINIMUM QUANTITY OF RIPRAP AND FILTER BLANKET SHALL BE NO LESS THAN THAT REQUIRED FOR 300 MM (12 INCH) DIAMETER PIPES.

SILT FENCE:
INSTALL AND MAINTAIN PER WIDNR CONSERVATION PRACTICE STANDARD 1056.

TRACKING PAD / CONSTRUCTION ENTRANCE:
INSTALL AND MAINTAIN PER WIDNR CONSERVATION PRACTICE STANDARD 1057. USE BROCK WHITE FODS TRACKOUT CONTROL MAT OR EQUAL PRODUCT. INSTALL AND MAINTAIN PER THE MANUFACTURER'S RECOMMENDATIONS AS TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED ROADWAYS. CLOSE ENTRANCES NOT PROTECTED BY TEMPORARY ROCK CONSTRUCTION ENTRANCES TO ALL CONSTRUCTION TRAFFIC.

TEMPORARY SEDIMENT BASINS
IN THE CONSTRUCTION PROCESS OR IF NOTED ON THE PLAN THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASIN(S). AS PER GENERAL RULE THE SEDIMENT BASIN SHALL BE SIZED APPROPRIATELY TO A CAPACITY RELEGATED TO THE DRAINAGE AREA ON A RATIO OF 3,600 CUBIC FEET PER ACRE OF DRAINAGE ZONE ENTERING THE BASIN. BASINS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT, MATERIAL REMOVED AND STABILIZED. IF CHANGES TO THE BASIN ARE MADE, DOCUMENT AND AMEND THE SWPP PLAN.

DEWATERING:

IF DEWATERING IS REQUIRED AND SUMP PUMPS ARE USED, ALL PUMPED WATER MUST BE DISCHARGED THROUGH AN EROSION CONTROL FACILITY (TEMPORARY SEDIMENTATION BASIN, GRIT CHAMBER, SAND FILTER, UPFLOW CHAMBER, HYDRO–CYCLONE, SWIRL CONCENTRATOR, DEWATERING BAG OR OTHER APPROPRIATE FACILITY) PRIOR TO LEAVING THE CONSTRUCTION SITE. PROPER ENERGY DISSIPATION MUST BE PROVIDED AT THE OUTLET OF THE PUMP SYSTEM. DISCHARGE CLEAR WATER ONLY. TO ACHIEVE BETTER SEPARATION OF THE MATERIAL SUSPENDED IN THE WATER A BIODEGRADABLE NOT TOXIC FLOCCULENT AGENT MAY BE REQUIRED. FOR MORE INFORMATION AND MATERIALS GO TO BY INTERSTATE PRODUCTS WWW.INTERSTATEPRODUCTS.COM

GEOTEXTILE DEWATERING BAGS SHALL MEET REQUIREMENTS OF DNR TECHNICAL STANDARD 1061. THE FOOTPRINT OF GEOTEXTILE BAGS SHALL BE NO SMALLER THAN 100 SQUARE FEET, AND SHALL BE SECURELY ATTACHED TO THE DISCHARGE PIPE. POLYMERS CAN BE USED TO ENHANCE THE EFFICIENCY OF GEOTEXTILE BAGS. IF USED, POLYMERS SHALL MEET THE CRITERIA WITHIN DNR TECHNICAL STANDARD 1051.

Table 1 – Prescriptive Compliance Area Soil Stabilization

Prescriptive Compliance Areas	Bare Soil	Slope & Channel Management	Periods of Inactivity	Final Grade
Soil stockpiles that will exist for more than 7 days **Utility trench backfills** **Temporary ditches/swales that will exist for more than 7 days** **Permanent ditches/swales** **Small areas – Less than 1 acre and less than 1% of site** **Discrete areas – Less than 1 acre** **Storm water practice side slopes** **Slopes steeper than 20%**	Areas that Do Not Drain to Sediment Basins or Traps Limit the duration of soil exposure to no more than 30 days. Areas that Drain to Sediment Basins or Traps Limit the duration of soil exposure to no more than 90 days. However, use the duration from the soil loss and sediment discharge calculations for the other areas of the site if less than 90 days.	General Design and implement approved soil stabilization practices per DNR technical standards. Refer to WisDOT Slope & Channel Matrices for appropriate slope and slope length conditions. Slopes Steeper than 20% Provide stable diversion of off-site runoff around the slope. Provide slope interruption devices in accordance with Manufactured Perimeter Control & Slope Interruption Products Technical Standard 1071 or equivalent methods to reduce uninterrupted slope length.	Planned Inactivity Stabilize immediately if area will be left inactive for more than 14 days. Unplanned Inactivity Stabilize area immediately if period of inactivity reaches 14 days.	Permanent Features Stabilize area immediately after reaching final grade. Temporary Features Stabilize area immediately after establishment of temporary feature or reaching specified temporary grade.

PCH_906_STABILIZATION
WDNR September 2017

INSPECTIONS–MAINTENANCE–DAILY RECORD–AMEND THE SWPP PLAN

1. CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES, STABILIZED AREAS, AND INFILTRATION AREAS ON A DAILY BASIS UNTIL LAND–DISTURBING ACTIVITY HAS CEASED. THEREAFTER, INSPECT AT LEAST ON A WEEKLY BASIS UNTIL VEGETATIVE COVER IS ESTABLISHED. INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES, STABILIZED AREAS, AND INFILTRATION AREAS WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. REMOVE ACCUMULATED SEDIMENT DEPOSITS FROM BEHIND EROSION AND SEDIMENT CONTROL DEVICES AS NEEDED. DO NOT ALLOW SEDIMENT TO ACCUMULATE TO A DEPTH OF MORE THAN ONE–THIRD OF THE HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICES. IMMEDIATELY REPLACE DETERIORATED, DAMAGED, ROTTED, OR MISSING EROSION CONTROL DEVICES. DOCUMENT INSPECTIONS AND DATES OF RAINFALL EVENTS. MAINTAIN A WRITTEN LOG OF ALL INSPECTION, MAINTENANCE, AND REPAIR ACTIVITIES RELATED TO EROSION AND SEDIMENT CONTROL FACILITIES. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS WITHIN 24 HOURS AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

2. ALL INSPECTIONS AND MAINTENANCE ACTIVITIES MUST BE RECORDED IN WRITING DAILY IN A DETAILED RECORD(NOTES, PHOTOGRAPHS, SKETCHES, ETC, AND KEPT WITH THE SWPPP BY THE CONTRACTOR.

3. CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED ONTO ADJACENT PROPERTY, PAVEMENT AREAS, SIDEWALKS, STREETS, AND ALLEYS. REMOVAL SHALL BE ON A DAILY BASIS THROUGHOUT THE DURATION OF THE CONSTRUCTION AND/OR AS DIRECTED BY THE CITY. CLEAN PAVED ROADWAYS BY SHOVELING OR WET–SWEEPING. DO NOT DRY SWEEP. IF NECESSARY, SCRAPE PAVED SURFACES IN ORDER TO LOOSEN COMPACTED SEDIMENT MATERIAL PRIOR TO SWEEPING. HAUL SEDIMENT MATERIAL TO A SUITABLE DISPOSAL AREA. STREET WASHING IS ALLOWED ONLY AFTER SEDIMENT HAS BEEN REMOVED BY SHOVELING OR SWEEPING.

4. ALL SOIL HAULED FROM THE SITE SHALL BE ACCOUNTED FOR AND DOCUMENTED IN THE SWPP BY THE CONTRACTOR. ITS FINAL DESTINATION AND HOW THE SOIL HAS BEEN STORED AND STABILIZED.

5. CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN PLACE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED (HARD–SURFACED AREAS PAVED AND VEGETATION ESTABLISHED IN GREEN SPACE). REPAIR ANY RILLING, GULLY FORMATION, OR WASHOUTS. AFTER FINAL ESTABLISHMENT OF PERMANENT STABILIZATION, REMOVE ALL TEMPORARY SYNTHETIC, STRUCTURAL, AND NONBIODEGRADABLE EROSION AND SEDIMENT CONTROL DEVICES AND ANY ACCUMULATED SEDIMENTS. DISPOSE–OF OFF SITE. RESTORE PERMANENT SEDIMENTATION BASINS TO THEIR DESIGN CONDITION IMMEDIATELY FOLLOWING STABILIZATION OF THE SITE.

6. CONTRACTOR SHALL CLEAN SEDIMENTATION BASINS, STORM SEWER CATCH BASINS, DITCHES, AND OTHER DRAINAGE FACILITIES AS REQUIRED IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 OF THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

7. CONTRACTOR SHALL INSPECT INFILTRATION AREAS TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITIES IS ACCUMULATING. REMOVE SEDIMENT IMMEDIATELY ENSURING SUBSOILS ARE NOT COMPACTED BY MACHINERY.

8. EVERY VEHICLE SHALL NOT TRACK MATERIAL OFF–SITE. CLEAN THE WHEELS OF CONSTRUCTION VEHICLES IN ORDER TO REMOVE SOILS BEFORE THE VEHICLES LEAVE THE CONSTRUCTION SITE. WASH VEHICLES ONLY ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

9. CONTRACTOR SHALL REINFORCE EROSION CONTROL FACILITIES IN AREAS WHERE CONCENTRATED FLOWS OCCUR (SUCH AS SWALES, DITCHES, AND AREAS IN FRONT OF CULVERTS AND CATCH BASINS) BY BACKING THEM WITH SNOW FENCE, WIRE MESH, OR STIFF PLASTIC MESH REINFORCEMENT UNTIL PAVING AND TURF ESTABLISHMENT OPERATIONS HAVE BEEN COMPLETED. POSTS FOR THE REINFORCING FENCE SHALL BE 100 MM (4 INCH) DIAMETER WOOD POSTS, OR STANDARD STEEL FENCE POSTS WEIGHING NOT LESS THAN 0.59 KG (1.3 LBS) PER LINEAL FOOT, WITH A MINIMUM LENGTH OF 762 MM (30 INCHES) PLUS BURIAL DEPTH. SPACE POSTS FOR THE REINFORCING FENCE AT INTERVALS OF 3 M (10 FEET) OR LESS. DRIVE POSTS FOR THE REINFORCING FENCE AT LEAST 0.6 M (2 FEET) INTO THE GROUND.

GENERAL SOIL STABILIZATION:
(SEE LANDSCAPE PLAN FOR MORE INFORMATION)

ESTABLISHMENT OF LAWN, PRAIRIE/WILDFLOWER AND/OR PLANT BED AREAS WILL BE NOTED ON THE LANDSCAPE PLAN

TO ENSURE STABILIZATION OF SOILS, RESTAKING OF SOD WHERE APPLICABLE, PROPER WATERING AND MULCH MAINTENANCE WILL BE REQUIRED. INSPECT SEEDED OR SODDED AREAS ON A TIMELY DAY–TO–DAY BASIS. IN THE EVENT OF A SEEDING FAILURE, RESEED AND REMULCH THE AREAS WHERE THE ORIGINAL SEED HAS FAILED TO GROW AND PERFORM ADDITIONAL WATERING AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. SPECIAL MAINTENANCE PROVISIONS FOR WILD AND PRAIRIE GRASS SEEDED AREAS AS NOTED IN THE LANDSCAPE PLAN. PROMPTLY REPLACE ALL SOD THAT DRIES OUT TO THE POINT WHERE IT IS PRESUMED DEAD AND ALL SOD THAT HAS BEEN DAMAGED, DISPLACED, WEAKENED, OR HEAVILY INFESTED WITH WEEDS AT NO ADDITIONAL COST TO THE OWNER. .

IN AREAS TO BE TEMPORARILY SEEDED, USE INTRODUCED SEED MIXTURE EQUIVALENT TO WIDOT #10 OR #20. APPLY SEED MIXTURE PER WIDOT 630.3.3.5. INCORPORATE A FERTILIZER (SLOW RELEASE TYPE WITH 10 WEEK RESIDUAL) CONSISTING OF 23–0–30 (%N–P–K) INTO THE SOIL AT AN APPLICATION RATE OF 224 KG PER HECTARE (200 LBS PER ACRE) BY DISKING PRIOR TO SEEDING. IN PROBLEMATIC AREAS IT MAY BE NECESSARY TO USE A LOW PHOSPHORUS ORGANIC FERTILIZER IN CASES WHERE SEEDS MAY NOT GERMINATE. IF THIS IS THE CASE, SEED AND FERTILIZER SHALL BE DISKED INTO THE SURFACE AND MULCHED PROPERLY TO ENSURE GERMINATION AND UPTAKE OF THE PHOSPHORUS BY THE SEED.

TO ENSURE ADEQUATE GERMINATION OF THE SEED THE WORK WILL BE PERFORMED AS FOLLOWS:
SPRING– FROM APRIL 1 THROUGH MAY 15.
FALL– FROM AUGUST 15 TO SEPTEMBER 20.
AFTER SEPTEMBER 20, WAIT UNTIL OCTOBER 30 TO PERFORM DORMANT SEEDING. DORMANT SEEDING WILL ONLY BE ALLOWED IF THE MAXIMUM SOIL TEMPERATURE AT A DEPTH OF 25 MM (1 INCH) DOES NOT EXCEED 4.44 DEGREES C (40 DEGREES F) IN ORDER TO PREVENT GERMINATION.

IN SEEDED AREAS WITH SLOPES STEEPER THAN 3:1 AND LENGTHS LESS THAN 15 METERS (50 FEET), INSTALL BIODEGRADABLE EROSION CONTROL BLANKETS UNIFORMLY OVER THE SOIL SURFACE BY HAND WITHIN 24 HOURS AFTER SEEDING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. USE WIDOT URBAN TYPE B OR OWNER APPROVED EQUAL.

IN AREAS WHERE IRRIGATION IS TO BE INSTALLED, CONTRACTOR SHALL WORK IN ZONES TO FINISH GRADE AND INSTALL THE SYSTEM IN ZONES. NOTE– EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL SOILS HAVE BEEN STABILIZED WITH SOD OR SEEDED AREAS THAT EXHIBIT MINIMUM OF 70% LAWN VEGETATIVE COVERAGE. IF SILT FENCE HAS TO BE REMOVED TO INSTALL THE IRRIGATION SYSTEM, IT SHALL BE REINSTALLED AT THE END OF EACH WORK DAY OR USE BIO ROLLS TO PROVIDE PROTECTION DURING THE INSTALLATION PROCESS UNTIL LAWN AREAS HAVE SOD AND/OR PLANT BEDS ARE MULCHED.

IN AREAS TO BE SODDED, SILT FENCE CAN BE REMOVED SHORT TERM FOR WORKING, BUT EXPOSED SOIL AREAS SHALL BE SODDED OR EROSION CONTROL MEASURES SHALL BE REINSTALLED AT THE END OF EACH WORK DAY.

NOTE: THE PROJECT'S LANDSCAPE PLAN IS PART OF THE SWPP FOR SOIL STABILIZATION. REFERENCES SHALL BE MADE TO THE APPROVED LANDSCAPE PLAN. AMENDMENTS TO THE LANDSCAPE PLAN SHALL BE APPROVED BY THE OWNER AND DOCUMENTED AS PART OF THE SWPP

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STORMWATER POLLUTION PREVENTION PLAN

CONVENIENCE STORE #970

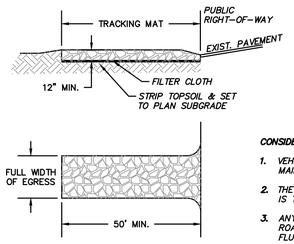
2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SWP2

ALL EROSION CONTROL MEASURES TO BE INSTALLED AND MAINTAINED PER WDNR STANDARDS

http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm



CONSIDERATIONS:

1. VEHICLES TRAVELING ACROSS THE TRACKING PAD SHOULD MAINTAIN A SLOW CONSTANT SPEED.
2. THE BEST APPROACH TO PREVENTING OFF-SITE TRACKING IS TO RESTRICT VEHICLES TO STABILIZED AREAS.
3. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.

NOTES:

A. TRACKING PAD:

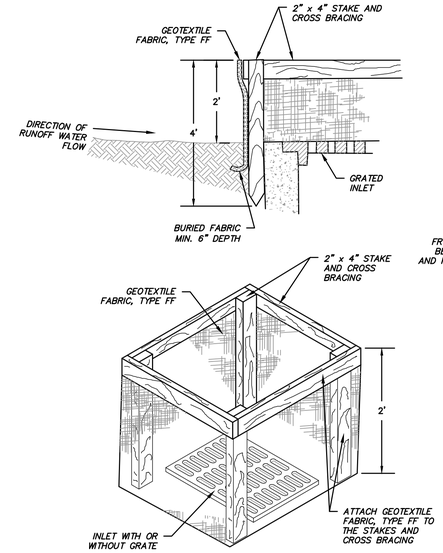
1. TRACKING PAD TO CONFORM TO WDNR CONSERVATION PRACTICE STANDARD 1057.
2. THE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
3. THE AGGREGATE FOR THE TRACKING PAD SHALL BE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION OF TABLE 1 OF THE WISCONSIN DNR TECHNICAL STANDARD 1057. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) 2018 STANDARD SPECIFICATION, SECTION 312, SELECT CRUSHED MATERIAL.
4. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PRACTICE, STONE TRACKING PADS SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOIL INTO THE STONE.
5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE A MINIMUM OF 50 FEET LONG.
6. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY FROM TRACKING PADS OR CONVEYED UNDER AND AROUND THEM BY USING A VARIETY OF PRACTICES, SUCH AS CULVERTS, WATER BARS, OR OTHER SIMILAR PRACTICES.

B. MAINTENANCE

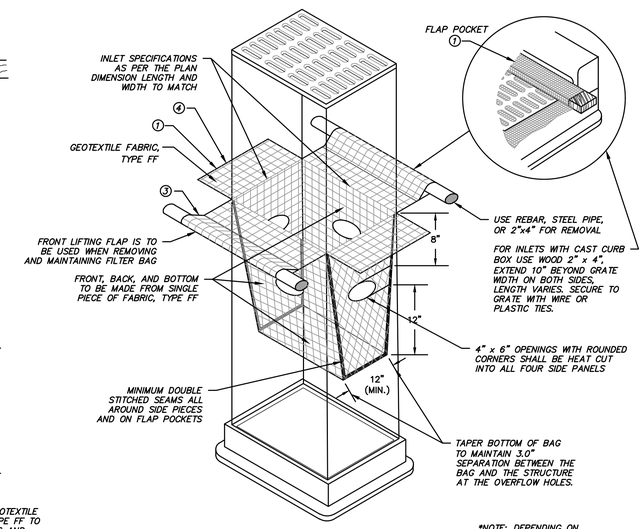
1. ROCKS LODGED BETWEEN THE TIRES IF DUAL WHEEL VEHICLES SHALL BE REMOVED PRIOR TO LEAVING THE CONSTRUCTION SITE.
2. TRACKING PADS AND TIRE WASHING STATIONS SHALL, AT AT MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
3. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
4. A MINIMUM 12-INCH THICK PAD SHALL BE MAINTAINED.

STONE TRACKING PAD DETAIL

(NOT TO SCALE)



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE 2)

*NOTE: DEPENDING ON EXPOSED SOIL TEXTURE, TYPE D-M OR TYPE D-HR INLET PROTECTION MAY BE USED IN PLACE OF TYPE D.

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4. THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.
4. SIDE FLAPS SHALL BE A MAXIMUM OF 2" LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.

GENERAL NOTES:

INLET PROTECTION DEVICES SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD 1060 AND BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE WISDOT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED IF ALLOWED BY ENGINEER.

TYPE A IS TO BE USED PRIOR TO PAVING AND INSTALLATION OF CURB AND GUTTER, AND TYPES B, C, AND D ARE TO BE USED AFTER PAVING IS PLACED.

TYPE A SHALL BE USED AROUND INLETS AND UNPAVED AREAS UNTIL PERMANENT STABILIZATION METHODS HAVE BEEN ESTABLISHED.

TYPE D SHALL BE USED IN AREAS WHERE OTHER TYPES OF INLET PROTECTION ARE INCOMPATIBLE WITH ROADWAY AND TRAFFIC CONDITIONS (I.E. POSSIBLE SAFETY HAZARD IF PONDING OCCURS), OR WHERE MORE EFFECTIVE INLET FILTERING IS NEEDED.

TAPER BOTTOM OF BAG TO MAINTAIN 3" OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.

GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP AND BOTTOM OF OUTSIDE OF FILTER BAG. FRONT, BACK, AND BOTTOM OF FILTER BAG BEING ONE PIECE.

INSTALLATION NOTES:

TYPE D:
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

MAINTENANCE:

REMOVE INLET PROTECTION DEVICES ONCE THE CONTRIBUTING DRAINAGE AREA IS STABILIZED WITH APPROPRIATE VEGETATION OR IMPERVIOUS SURFACE.

INLET PROTECTION SHALL BE, AT A MINIMUM, INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.

FOR TYPE A INLET PROTECTION, SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED BETWEEN 1/3 TO 1/2 THE DESIGN DEPTH OF THE DEVICE, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING AS DESIGNED.

FOR TYPE D INLET PROTECTION (INCLUDING D-M AND D-HR), REMOVE SEDIMENT WHEN SEDIMENT ACCUMULATES TO WITHIN 6" OF THE BOTTOM OF THE OVERFLOW HOLES, OR WHEN STANDING WATER REMAINS WITHIN 6" OF THE BOTTOM OF THE OVERFLOW HOLES 24 HOURS AFTER A RUNOFF EVENT. HOLES IN THE TYPE FF FABRIC MAY BE REPAIRED BY STITCHING IF LESS THAN 2" IN LENGTH, BUT THE FABRIC SHOULD BE REPLACED IF THE HOLES ARE GREATER THAN 2" IN LENGTH IN THE TYPE FF FABRIC OR IF THERE ARE ANY HOLES IN THE TYPE HR FABRIC. THE FILTER MUST ALSO BE REPLACED IF THE FLAP POCKETS SUSTAIN DAMAGE THAT COMPROMISES FILTER INTEGRITY OR THE ABILITY TO PERFORM MAINTENANCE.

REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLET AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

STORM DRAIN INLET PROTECTION DETAILS

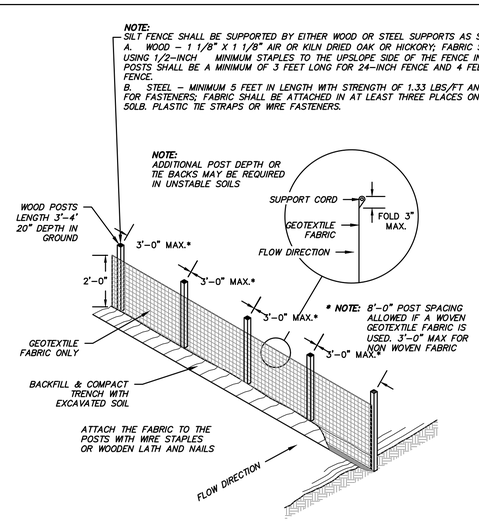
(NOT TO SCALE)

NOTES:

1. SILT FENCE INSTALLATION AND MATERIALS SHALL CONFORM TO WDNR CONSERVATION STANDARD 1056
2. SILT FENCE SHALL BE PLACED ON THE CONTOUR AND NOT PERPENDICULAR TO THE CONTOUR. THE ENDS SHALL BE EXTENDED UPSLOPE TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE FENCE.
3. WHEN SILT FENCE IS INSTALLED ON A SLOPE, THE PARALLEL SPACING SHALL NOT EXCEED THE REQUIREMENTS IN THE TABLE BELOW:

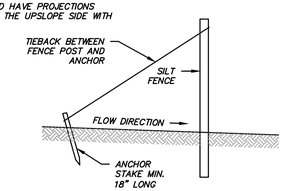
SLOPE	FENCE SPACING
< 2%	100 FEET
2 TO 5%	75 FEET
5 TO 10%	50 FEET
10 TO 33%	25 FEET
> 33%	20 FEET

4. INSTALLED SILT FENCES SHALL BE MINIMUM 14 INCHES HIGH AND A MAXIMUM OF 28 INCHES IN HEIGHT MEASURED FROM THE INSTALLED GROUND ELEVATION.
5. A MINIMUM OF 20 INCHES OF THE POST SHALL EXTEND INTO THE GROUND AFTER INSTALLATION.
6. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF THE FABRIC IN A 4-INCH TRENCH WIDE BY 6-INCH DEEP TRENCH, OR 6-INCH V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCH SHALL BE BACKFILLED AND COMPACTED. TRENCHES SHALL NOT BE EXCAVATED WIDER THAN NECESSARY FOR PROPER INSTALLATION.
7. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS:
   A) TWIST METHOD---OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES.
   B) HOOK METHOD---HOOK THE END OF EACH SILT FENCE LENGTH.
8. SILT FENCE SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EACH PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
9. DAMAGED OR DECOMPOSED FENCES, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.
10. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE THE DEPOSITS REACH ONE HALF THE HEIGHT OF THE FENCE.
11. SILT FENCES SHALL BE REMOVED ONCE THE DISTURBED AREA IS PERMANENTLY STABILIZED AND IS NO LONGER SUSCEPTIBLE TO EROSION.



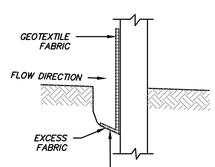
SILT FENCE DETAIL

(NOT TO SCALE)



SILT FENCE TIE BACK

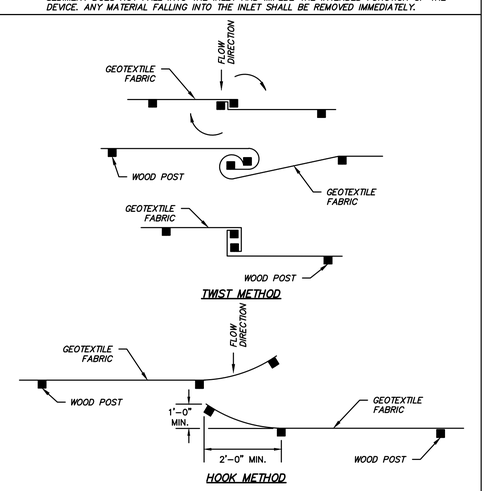
(WHEN ADDITIONAL SUPPORT IS REQUIRED)



TRENCH DETAIL

NOTES:

1. TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.



JOINING TWO LENGTHS OF SILT FENCE

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EROSION CONTROL DETAILS

CONVENIENCE STORE #970

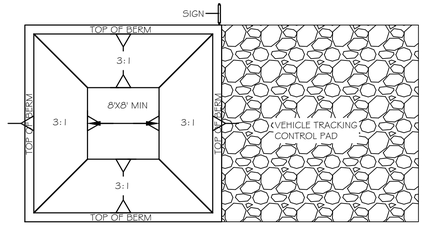
2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

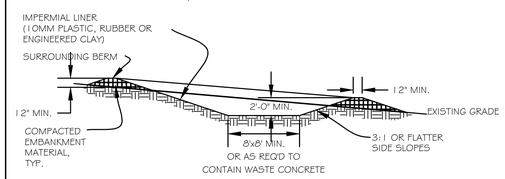
DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SWP3

ALL EROSION CONTROL MEASURES TO BE INSTALLED AND MAINTAINED PER WDNR STANDARDS

http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm



PLAN
1/8"= 1'-0"



TYPICAL SECTION
1/8"= 1'-0"

CONCRETE WASHOUT AREA INSTALLATION NOTES

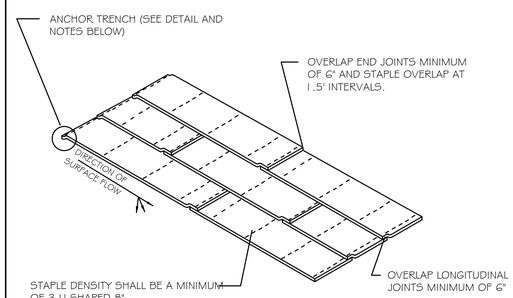
1. SEE EROSION CONTROL PLAN FOR LOCATIONS OF CONCRETE WASHOUT AREA(S). TO BE PLACED A MIN. OF 50' FROM DRAINAGEWAYS, BODIES OF WATER, AND INLETS.)
2. THE CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL PAD IS REQD AT THE ACCESS POINT(S).
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA(S), AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREAS TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

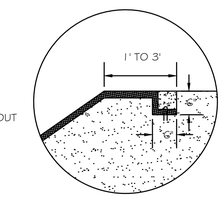
6. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE
7. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
8. WHEN CONCRETE WASHOUT AREA(S) IS REMOVED, THE DISTURBED AREA SHALL BE STABILIZED PER SITE EROSION CONTROL MEASURES.
9. INSPECT WEEKLY AND DURING AND AFTER ALL STORM EVENTS. CLEAN-OUT OR COVER WASHOUT AREA PRIOR TO PREDICTED STORM EVENTS TO PREVENT OVER-FLOW.

CONCRETE WASHOUT AREA

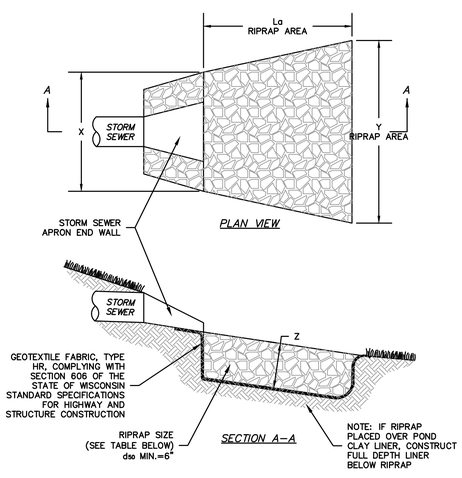
EROSION CONTROL BLANKET(SEEDED AREAS) ON SIDE SLOPES OF 3:1 OR GREATER AND STORM WATER BASINS
BIO-DEGRADABLE, DOUBLE NETTED, LIGHT DUTY(HEAVY DUTY IN DRAINAGE SWALES)
(WisDOT CLASS 1 TYPE B)



ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH



EROSION CONTROL BLANKET INSTALLATION

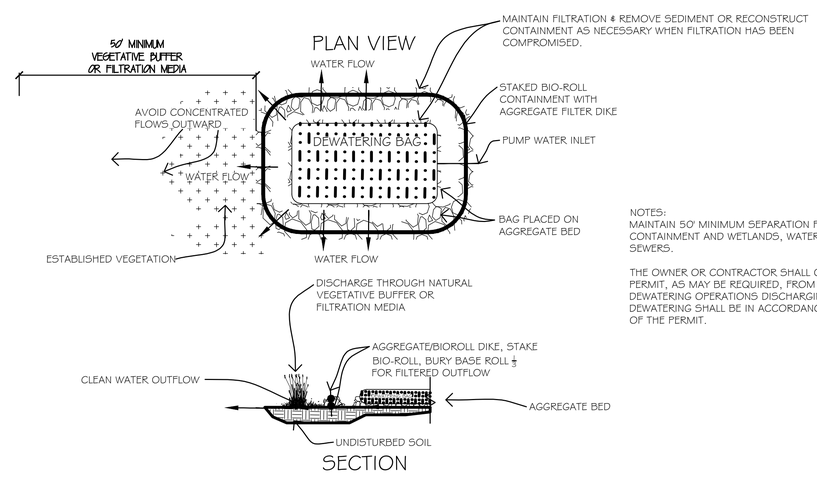


RIPRAP SHALL COMPLY WITH THE SECTION 606 OF THE STATE OF WISCONSIN STANDARD FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

PLAN VIEW CONTOURS AND GRADES REPRESENT PROPOSED TOP OF RIPRAP ELEVATIONS.

RIPRAP

RIP RAP AT FLARED END SECTIONS



NOTES:
MAINTAIN 50' MINIMUM SEPARATION FROM DISCHARGE CONTAINMENT AND WETLANDS, WATER BODIES, OR STORM SEWERS.

THE OWNER OR CONTRACTOR SHALL OBTAIN DEWATERING PERMIT, AS MAY BE REQUIRED, FROM THE STATE PRIOR TO ANY DEWATERING OPERATIONS DISCHARGING FROM THE SITE. ALL DEWATERING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT.

DEWATERING BAG INSTALLATION, FOR DISCHARGING ERODED, SUSPENDED PARTICLES IN WATER
NOT TO SCALE

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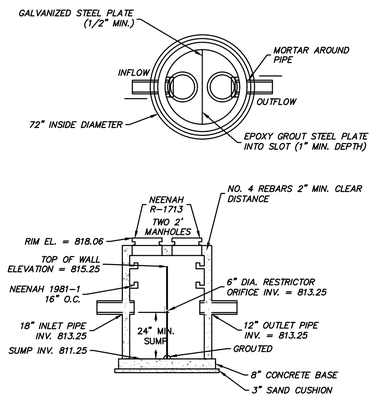
EROSION CONTROL DETAILS

CONVENIENCE STORE #970

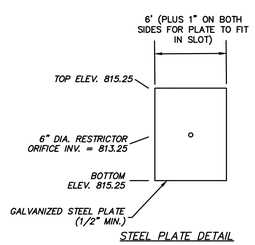
2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SWP4

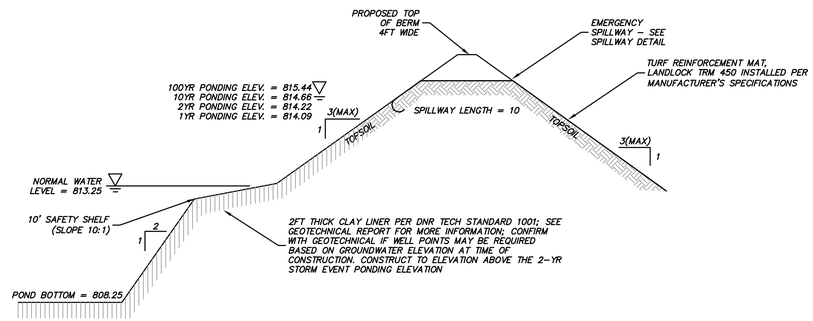


NOTES:
1. STRUCTURE SHALL BE CONSTRUCTED CONFORMING TO THE REQUIREMENTS OF ASTM C-478.
2. REINFORCING STEEL NOT SHOWN

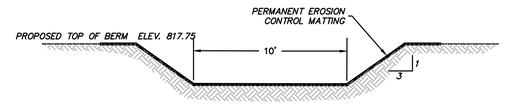


STEEL PLATE DETAIL

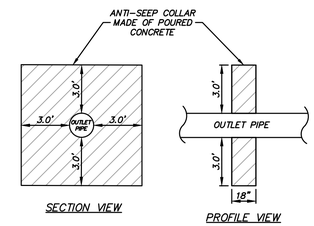
OUTLET CONTROL STRUCTURE POND - MH 400



TYPICAL POND CROSS SECTION W/ OUTLET STRUCTURE
(SECTION W/OUTLET)



STORM WATER FACILITY SPILLWAY
(NOT TO SCALE)



ANTI-SEEP COLLAR

CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE CITY OF WAUKESHA EROSION CONTROL ORDINANCE, THE WISCONSIN DNR STORMWATER CONSTRUCTION AND POST CONSTRUCTION TECHNICAL STANDARDS, WDNR PERMIT CONDITIONS, AND THESE DOCUMENTS; THE MOST STRINGENT TO APPLY.

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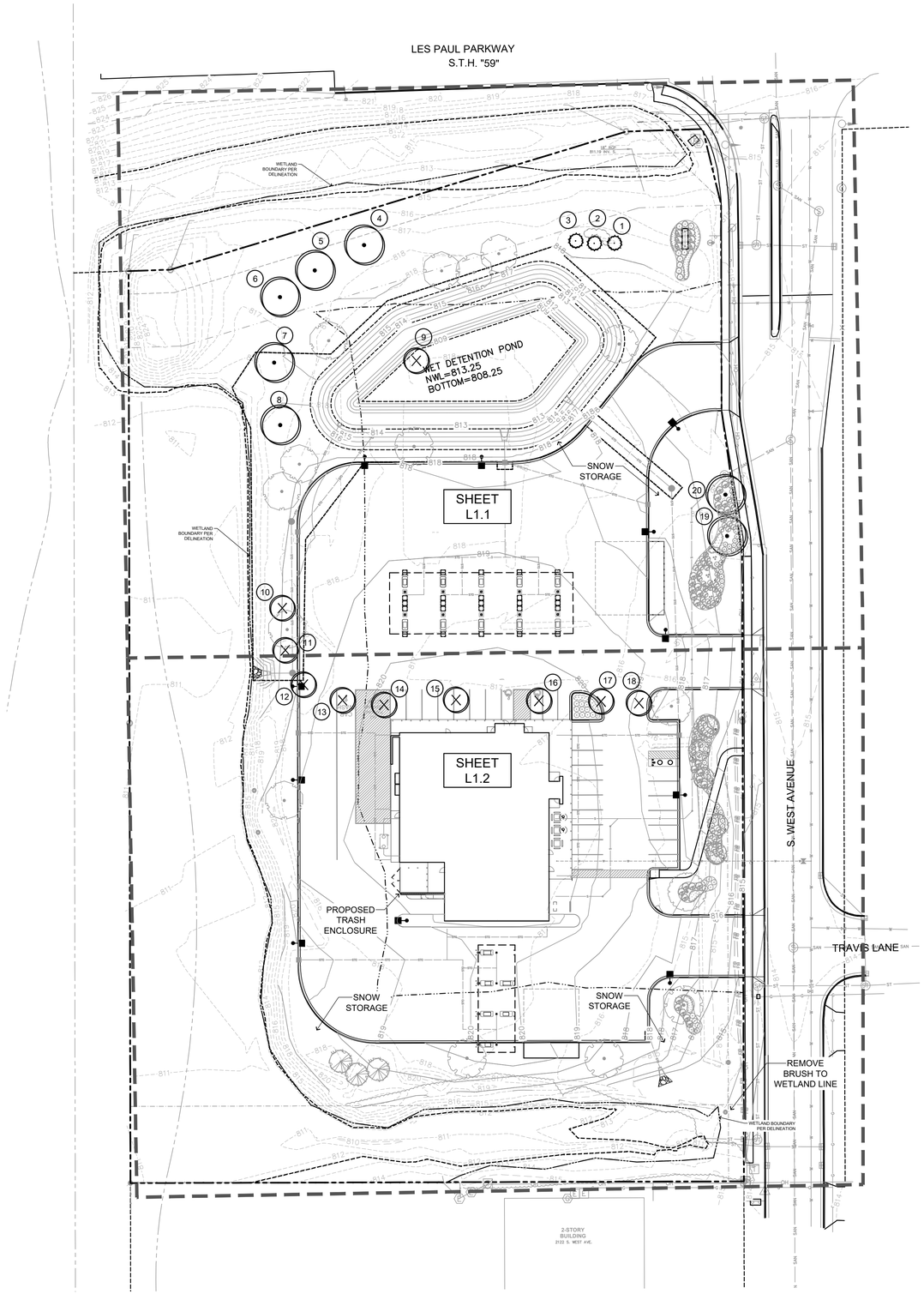
SW BMP DETAILS

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	SWP5



PROPOSED PLANT KEY

DECIDUOUS TREES

DECIDUOUS SHRUBS

EVERGREEN SHRUBS

ORNAMENTAL TREES

ORNAMENTAL GRASSES

PERENNIALS

EXISTING TREE TO BE REMOVED

EXISTING TREE TO REMAIN

GENERAL LANDSCAPE NOTES

- ALL DETAILS AND SPECIFICATIONS TO BE DETERMINED ON FINAL LANDSCAPE PLANS.
- ALL PLANTINGS SHALL COMPLY WITH STANDARDS AS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - ANSI Z60.1 (LATEST VERSION)
- MULCH: ALL PLANTING BEDS TO RECEIVE 3" DEEP LAYER OF SHREDDED HARDWOOD BARK MULCH.
- TURF SEED: DURABLE, PREMIUM COMMERCIAL BLEND.

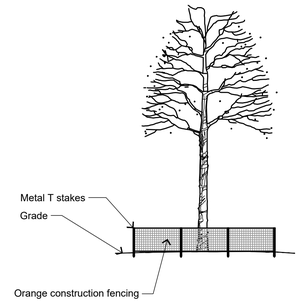
EXISTING TREE INVENTORY

Kwik Trip 970 Waukesha, WI
Existing Trees

Key	Size DBH / HT	Tree	
1	8" / 30-40'	Norway Spruce	Remain
2	8" / 30-40'	Norway Spruce	Remain
3	8" / 30-40'	Norway Spruce	Remain
4	9"	Flowering Pear	Remain
5	7"	Flowering Pear	Remain
6	8"	Oak	Remain
7	10"	Oak	Remain
8	10"	Oak	Remain
9	2"	Maple	Remove
10	9"	Oak	Remove
11	9"	Oak	Remove
12	9"	Oak	Remove
13	6"	Flowering Pear	Remove
14	9"	Flowering Pear	Remove
15	10"	Flowering Pear	Remove
16	6"	Japanese Tree Lilac	Remove
17	10"	Locust	Remove
18	10"	Locust	Remove
19	7"	Locust	Remain
20	7"	Locust	Remain

SCALE: 1" = 40'

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE ½ SCALE- 1"=20'.



Notes
1. Install 4' high orange vinyl snow / construction fencing or similar fencing as shown on this plan.
2. Erect fence with 5' metal t-stakes at least every 10'.
3. The fencing shall be in place before construction activity begins and remain until all exterior work has been completed.
4. No construction activity shall take place nor shall any equipment be stored inside of the fencing.

1 TREE PROTECTION FENCING DETAIL

NOT TO SCALE

P-PL-PLA-02

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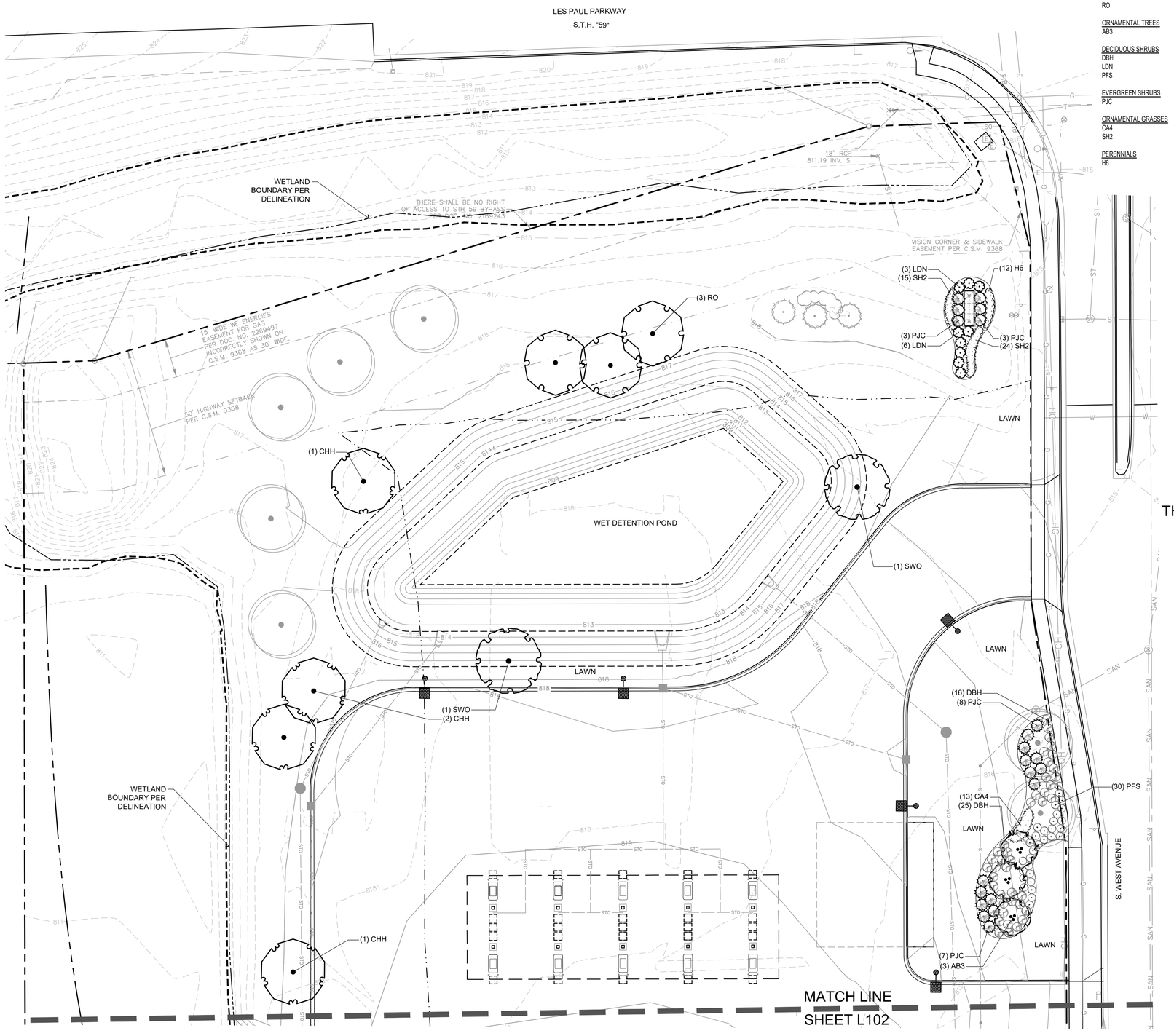
LANDSCAPE PLAN OVERALL

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	L1.0



PLANT SCHEDULE NORTH

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
CHH	4	Chicagoland Hackberry	Celtis occidentalis 'Chicagoland'	2 1/2" CAL	B&B	Full, matching heads
SWO	2	Swamp White Oak	Quercus bicolor	2 1/2" CAL	B&B	Full, matching heads
RO	3	Red Oak	Quercus rubra	2 1/2" CAL	B&B	Full, matching heads

ORNAMENTAL TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
AB3	3	Autumn Brilliance Serviceberry	Amelanchier x grandiflora 'Autumn Brilliance'	6' - 7' HT	B&B	Clump, min. 3 stems

DECIDUOUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
DBH	41	Dwarf Bush Honeysuckle	Diervilla lonicera	18" HT	CONT.	
LDN	9	Little Devil Dwarf Ninebark	Physocarpus opulifolius 'Little Devil' TM	24" HT	CONT.	
PFS	30	Pink-a-licious Fritsch Spirea	Spiraea fritschiana 'J.N. Select A'	18" HT	CONT.	

EVERGREEN SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PJC	21	Kallay Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'	18"SPD	CONT.	

ORNAMENTAL GRASSES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
CA4	13	Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 GAL	POT	24" Spacing
SH2	39	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	1 GAL	POT	18" Spacing

PERENNIALS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
H6	12	Little Business Daylily	Hemerocallis x 'Little Business'	4 1/2"	POT	24" Spacing

EXISTING DECIDUOUS TREE TO REMAIN

EXISTING EVERGREEN TREE TO REMAIN

EXISTING SHRUBS TO REMAIN

GENERAL LANDSCAPE NOTES

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- TURF SEED: DURABLE, PREMIUM COMMERCIAL BLEND.

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SCALE: 1" = 20'

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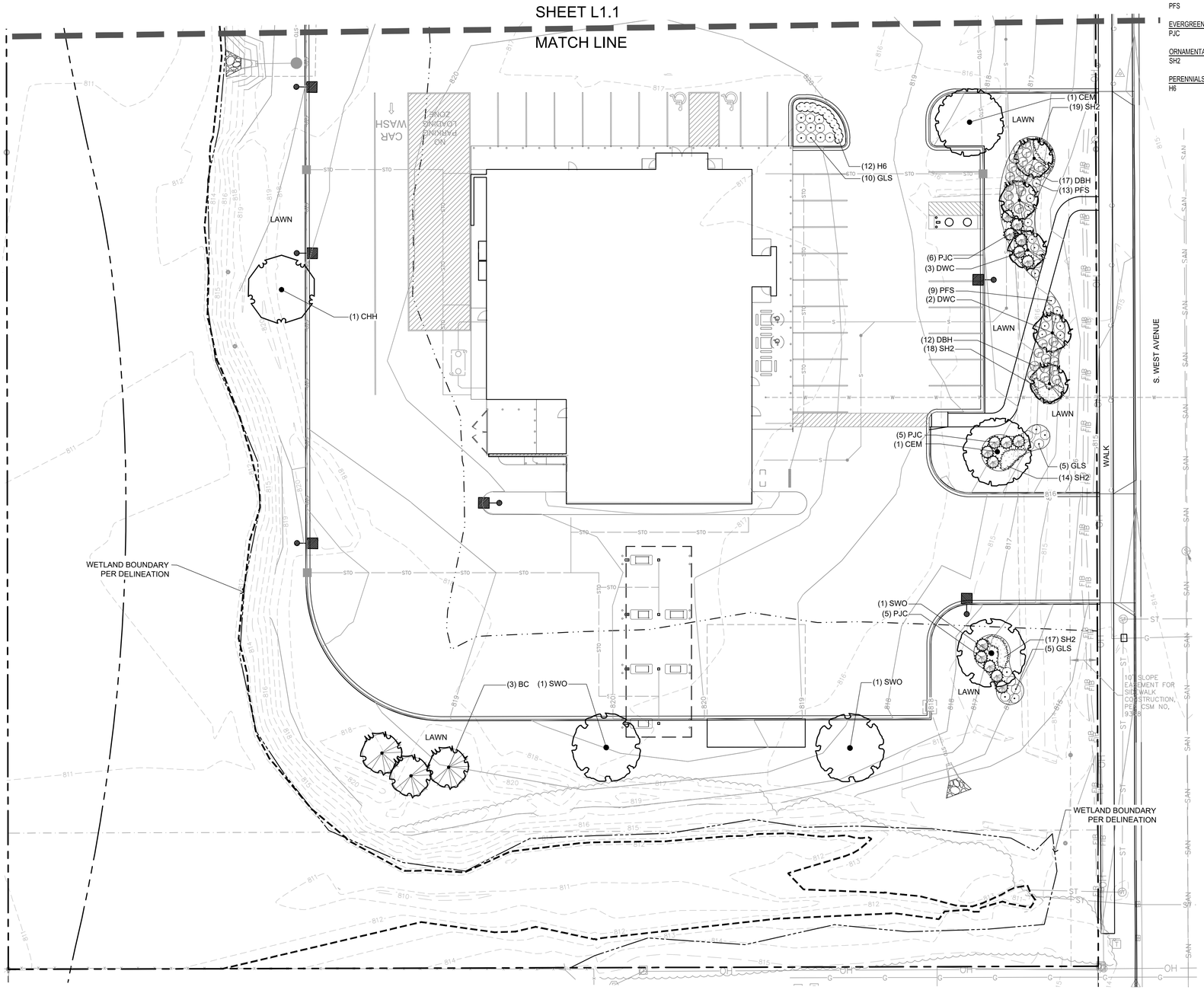
LANDSCAPE PLAN - NORTH

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	L1.1



PLANT SCHEDULE SOUTH

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
CEM	2	Celebration Maple	Acer freemanii `Celebration`	2 1/2" CAL	B&B	Full, matching heads
CHH	1	Chicagoland Hackberry	Celtis occidentalis `Chicagoland`	2 1/2" CAL	B&B	Full, matching heads
SWO	3	Swamp White Oak	Quercus bicolor	2 1/2" CAL	B&B	Full, matching heads
BC	3	Bald Cypress	Taxodium distichum	6` - 7` HT	B&B	
ORNAMENTAL TREES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
DWC	5	Donald Wyman Crab Apple	Malus x `Donald Wyman`	2 1/2" CAL	B&B	Full, matching heads
DECIDUOUS SHRUBS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
DBH	29	Dwarf Bush Honeysuckle	Diervilla lonicera	18" HT	CONT.	
GLS	20	Gro-Low Fragrant Sumac	Rhus aromatica `Gro-Low`	18" HT	CONT.	
PFS	22	Pink-a-licious Fritsch Spirea	Spiraea fritschiana `J.N. Select A`	18" HT	CONT.	
EVERGREEN SHRUBS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
PJC	16	Kallay Compact Pfitzer Juniper	Juniperus chinensis `Kallays Compact`	18"SPD	CONT.	
ORNAMENTAL GRASSES	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
SH2	68	Tara Prairie Dropseed	Sporobolus heterolepis `Tara`	1 GAL	POT	18" Spacing
PERENNIALS	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**SIZE**	**ROOT**	**REMARKS**
H6	12	Little Business Daylily	Hemerocallis x `Little Business`	4 1/2"	POT	24" Spacing

EXISTING DECIDUOUS TREE TO REMAIN

EXISTING EVERGREEN TREE TO REMAIN

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LANDSCAPE PLAN - SOUTH

CONVENIENCE STORE #970

2106 S. WEST AVENUE
WAUKESHA, WI

#	DATE	DESCRIPTION

DRAWN BY	RAS
SCALE	GRAPHIC
PROJ. NO.	3190495
DATE	2020-05-04
SHEET	L1.2