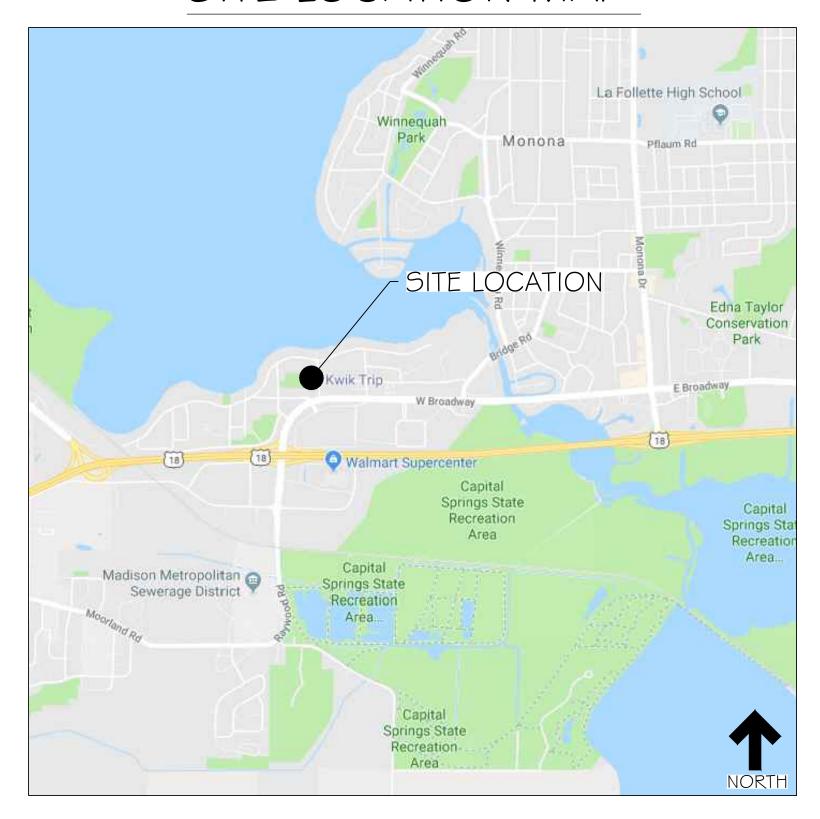
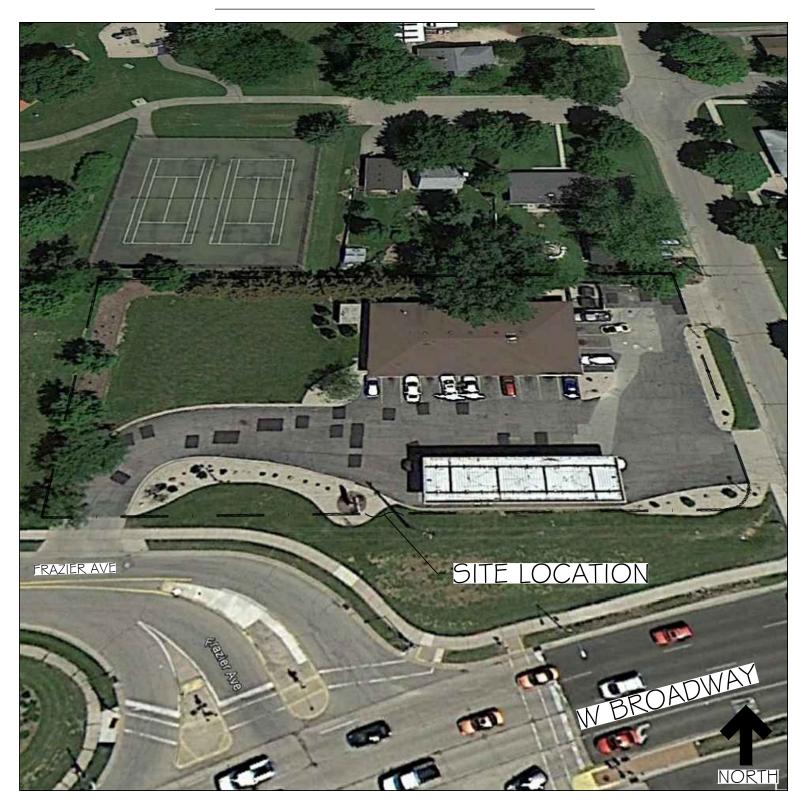
SITE IMPROVEMENT PLANS FOR:

KWIK TRIP #965 2402 W BROADWAY MADISON, WISCONSIN

SITE LOCATION MAP:



SITE AERIAL MAP:



DRAWING	SINDEX
TI	TITLE SHEET
ALTA	ALTA SURVEY
DMI	DEMO PLAN
SPI	SITE DIMENSION PLAN
SPI.I	SITE PLAN KEYNOTE
SP2	GRADE PLAN
SP2.1	GRADE PLAN DETAILS
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SWPI	EROSION CONTROL PLAN
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SWP3	EROSION CONTROL DETAILS
SWP4	EROSION CONTROL DETAILS
LI	LANDSCAPE PLAN
ΕI	LIGHTING PLAN

SURVEYOR:

608.838.0444

SNYDER & ASSOCIATES

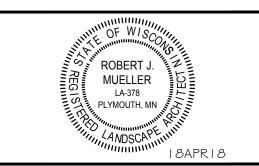
ARGROSS@SNYDER-ASSOCIATES.COM

KWIK TRIP



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





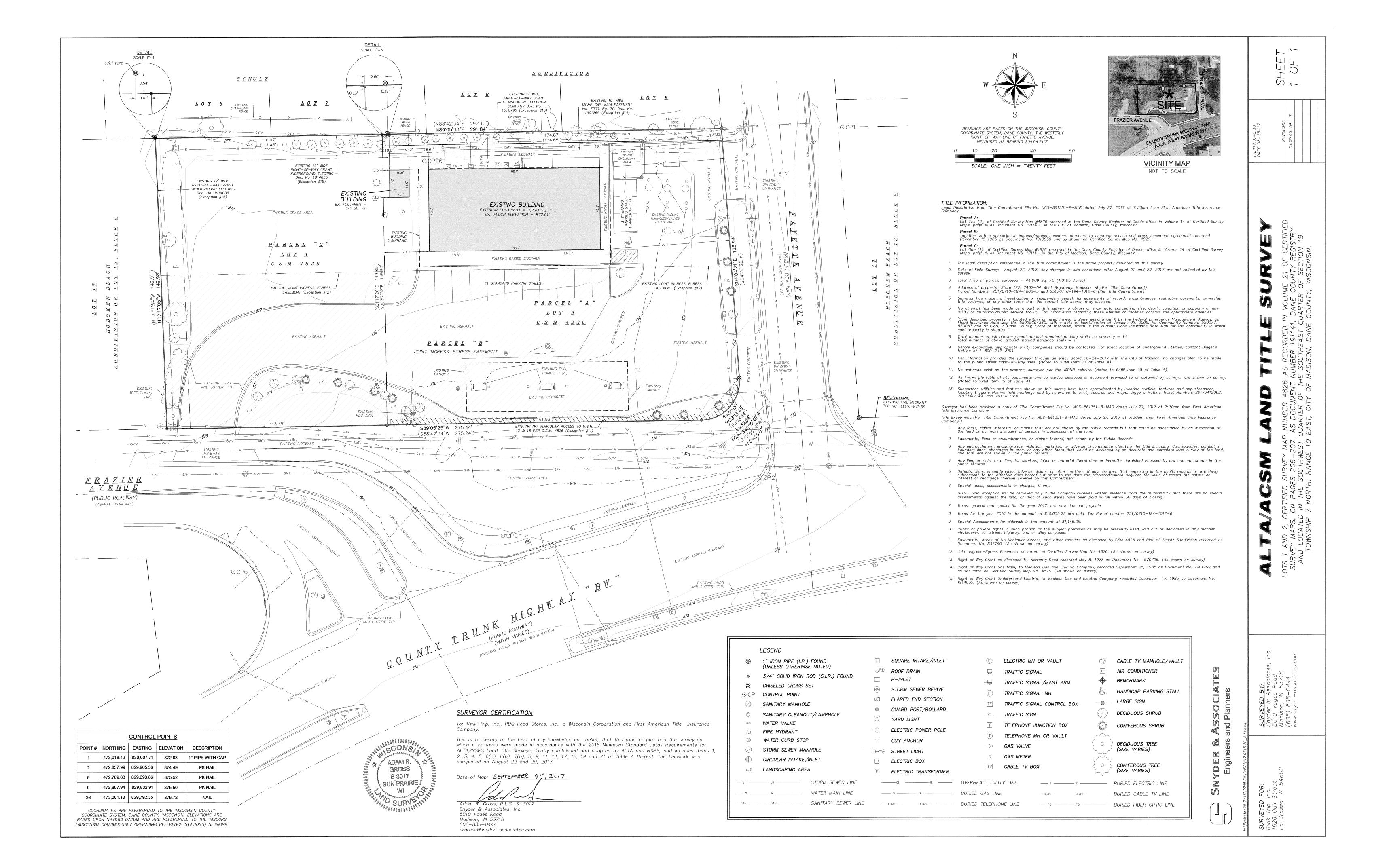
965 STORE

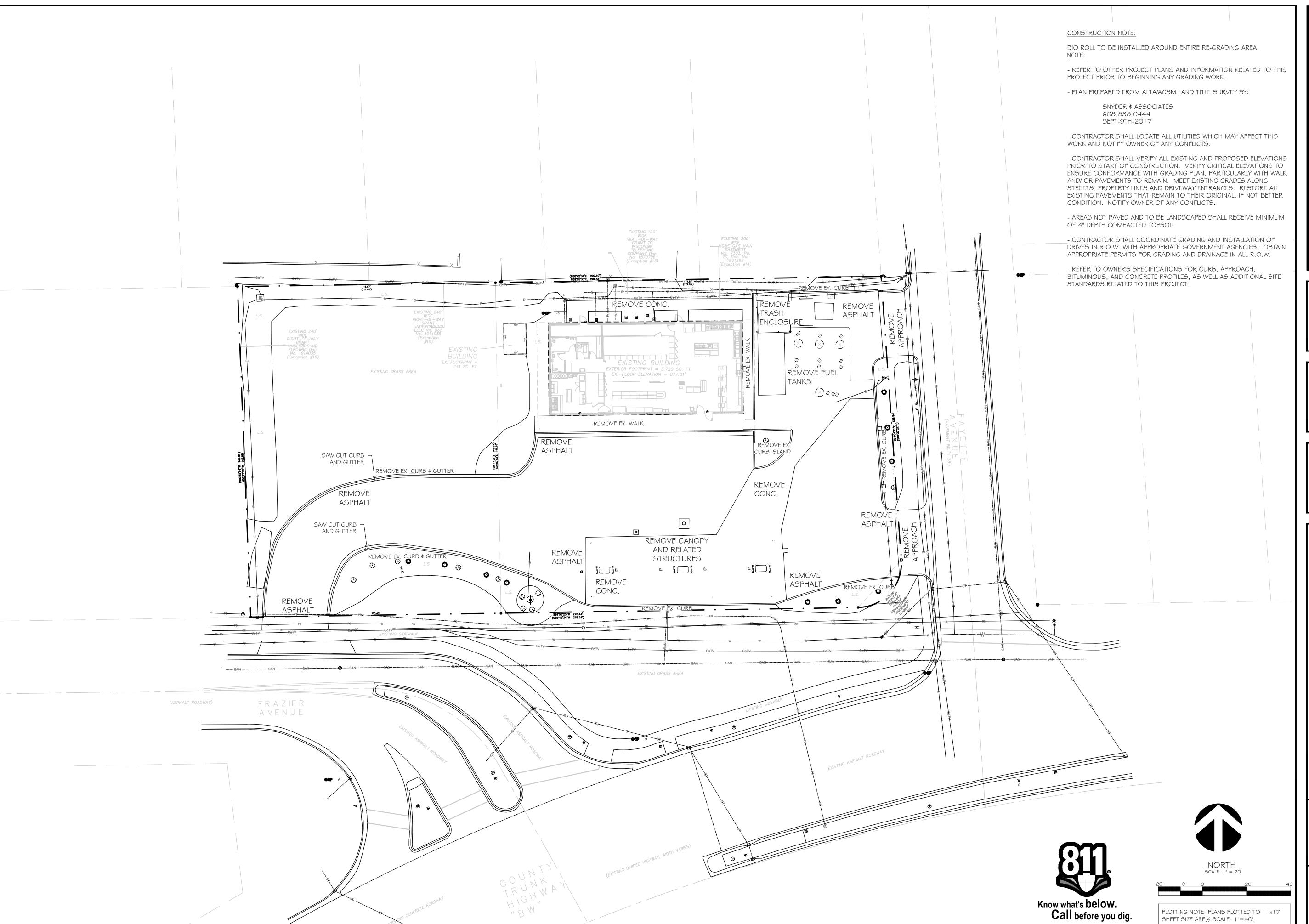
2402 W BROADWAY MADISON, WISCONSIN

18APR2018

OWNER: KWIK TRIP INC. 1626 OAK STREET LA CROSSE, WI 54602 BJORN BERG (608)-791-4343 BBERG@kwiktrip.com

SITE PLANNER: INSITES SITE PLANNING 3030 HARBOR LN N, SUITE 131 PLYMOUTH, MN 55447 BOB MUELLER 763-383-8400 Bob@InsitesInc.net

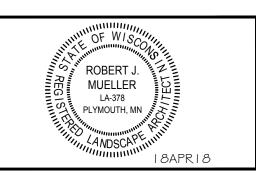




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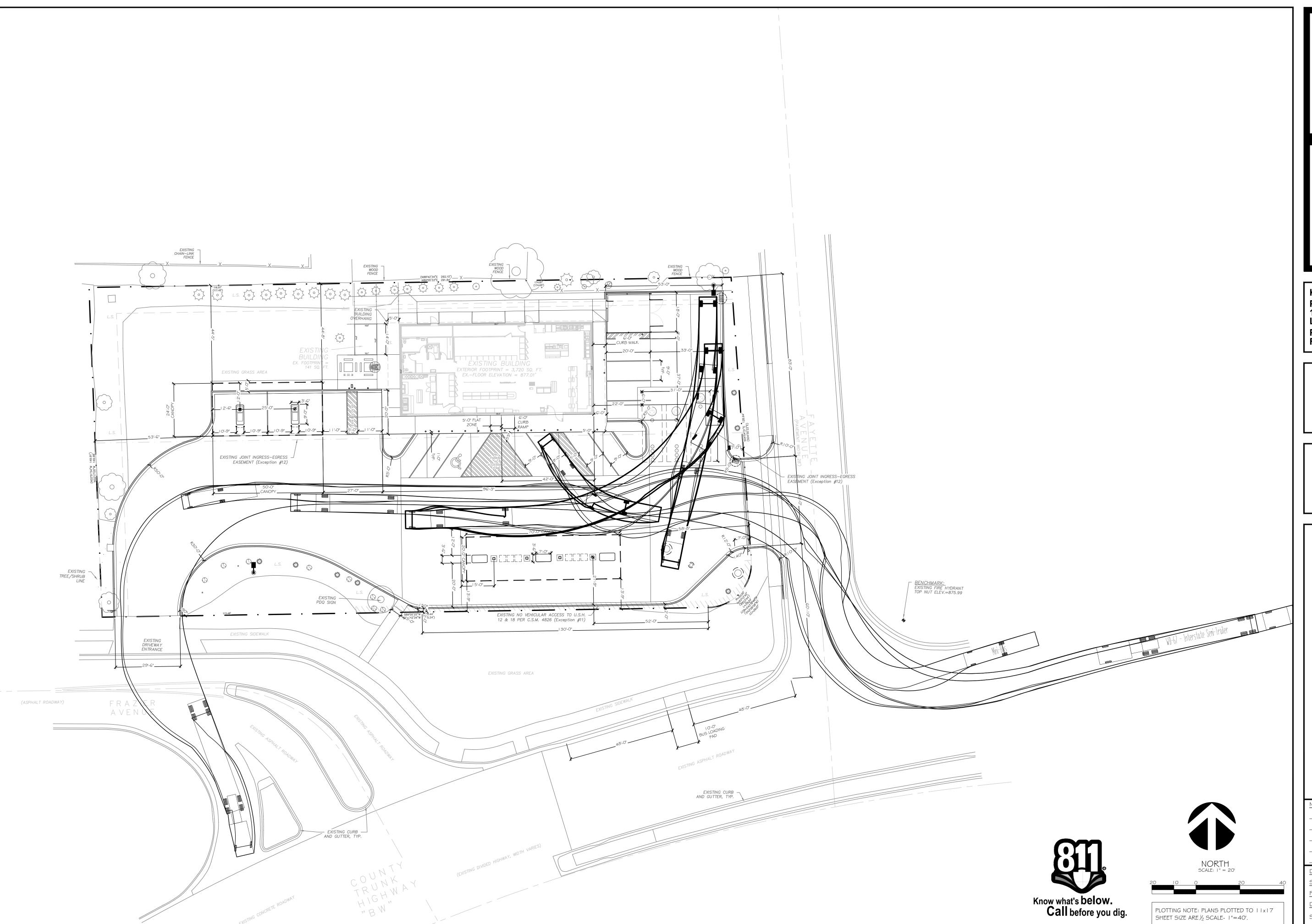
> 3030 Harbor Lane North, STE 131 Plymouth Minnesota 55447 763.383.8400



965 STORE

DEMO PLAN	CONVENIENCE S	2402 W BROADWAY MADISON, WISCONSIN
IO. DATE	DESCRIPTION	
- 8JUNE		
- 17JULY - 25JULY	718 SUBMITTAL 118 ADD CANOPY	

DRAWN BY	
SCALE	GRAPHIC
PROJ. NO.	17965
DATE	18APR2018
SHEET	DM1

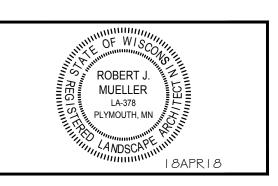


KWIK TRIP

KWIK Star

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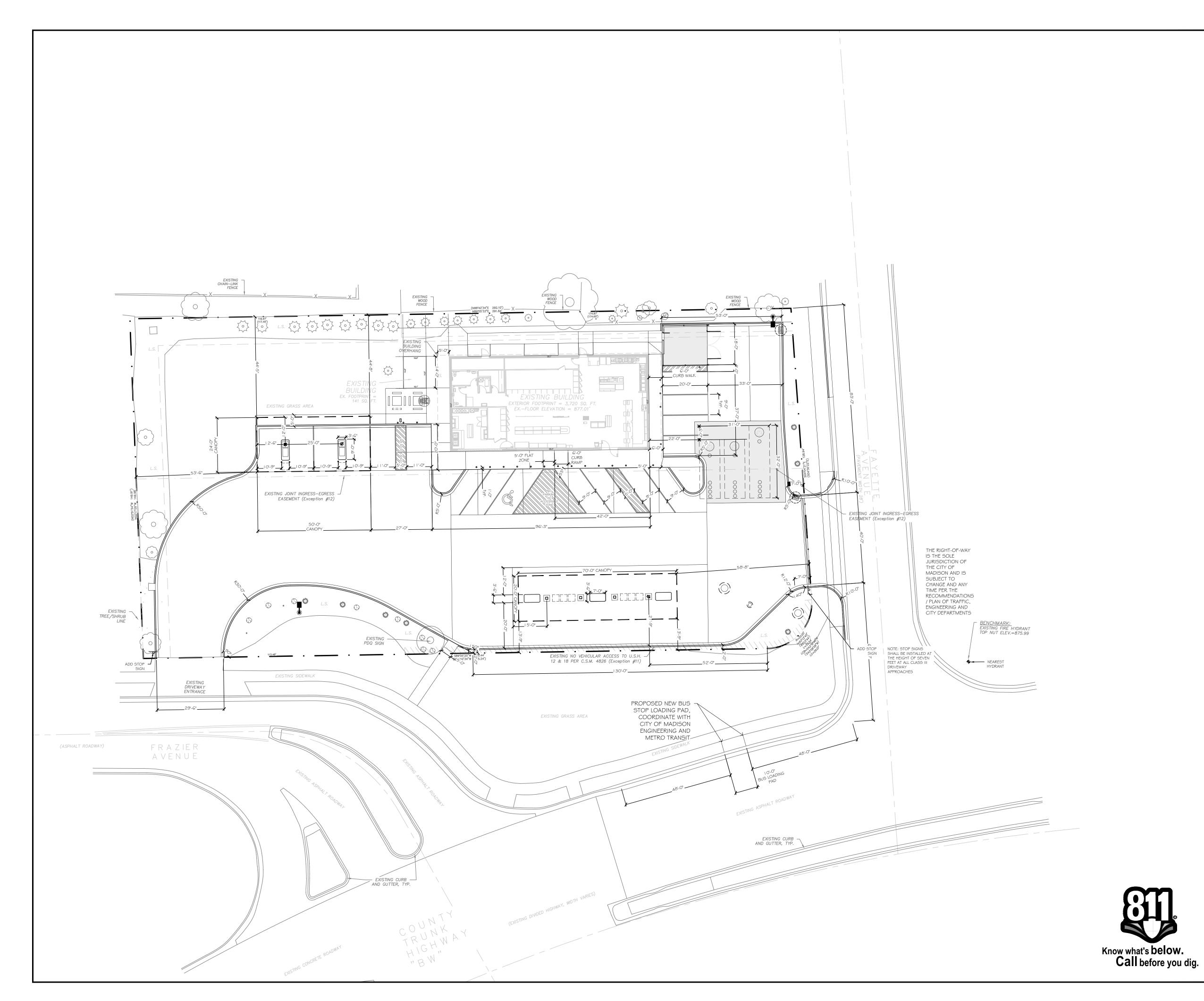




965 **CIRCULATION PLAN** STORE ONVENIENCE

SITE CIRCULATIO	CONVENIENCE S'	2402 W BROADWAY MADISON, WISCONSIN
NO. DATE	DESCRIPTION	
	SUBMITTAL SUBMITTAL ADD CANOPY	

DRAWN BY	
SCALE	GRAPHIC
PROJ. NO.	17965
DATE	18APR2018
SHEET	SP0



CONSTRUCTION NOTE:

Construction fencing to be installed around entire construction site. Coordinate with owner for

LAYOUT NOTES:

- I. PLAN PREPARED FROM AN ALTA/ACSM LAND TITLE SURVEY BY: SNYDER & ASSOCIATES 608.838.0444 SEPT-9TH-2017
- 2. CURBS ARE DIMENSIONED TO FACE OF
- 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. EXTERIOR CONCRETE SURFACES TO BE SEALED. CONCRETE SEALER:

 APR 15- OCT 3 | USE: TK-26UV

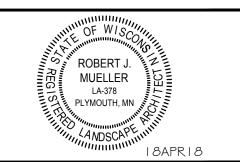
 NOV 1- DEC 3 | USE: TK-290
- EXPANSION JOINTS SHALL BE DECK-O-FOAMED AND CAULKED WITH SLI

fencing and gate locations and appropriate signage installation.

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> 3030 Harbor Lane North, STE 131 Plymouth Minnesota 55447 763.383.8400 fax 763.383.8440



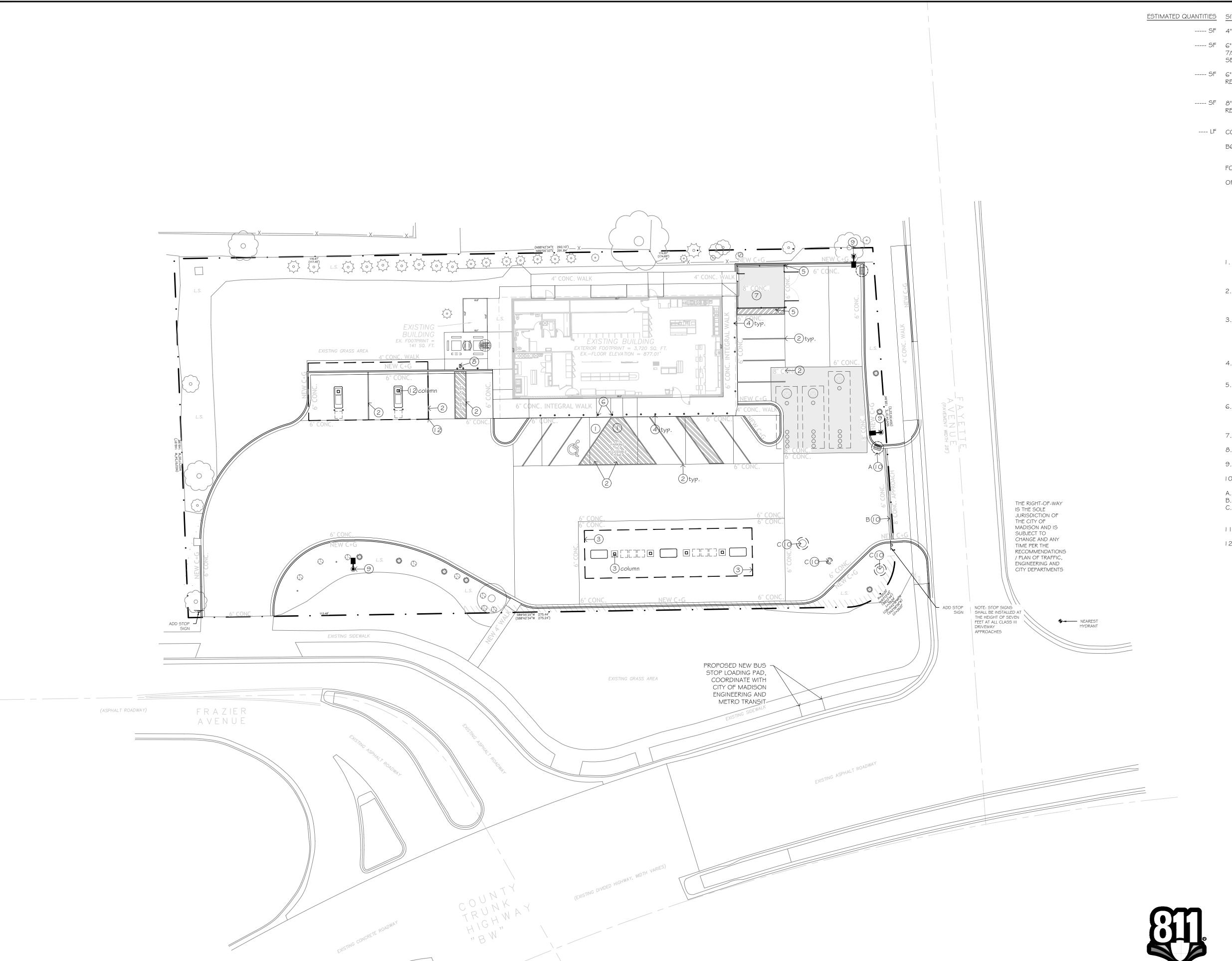
96 STORE 2402 W BROADWAY MADISON, WISCONSIN CONVENIENCE

PLAN

SITE NO. DATE DESCRIPTION 8JUNE 18 SUBMITTAL 17JULY 18 SUBMITTAL 25JULY 18 ADD CANOPY

DRAWN BY	
SCALE	GRAPHIC
PROJ. NO.	17965
DATE	18APR2018
SHEET	SP1

PLOTTING NOTE: PLANS PLOTTED TO 11x17 SHEET SIZE ARE \(\frac{1}{2} \) SCALE- 1"=40'.



ESTIMATED QUANTITIES SITE PLAN NOTES AND KEYNOTES

----- SF 4" DEPTH CONCRETE WALK PER DETAIL 3/SPD

----- SF 6" INTEGRAL CONCRETE CURB/ WALK. SEE DETAIL 7/SPD FOR NON-FLUSH SECTIONS. CONCRETE SEALER: TK-26UV

---- SF 6" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #3
REBAR.
CONCRETE SEALER: TK-2GUV

----- SF 8" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #3 REBAR.

CONCRETE SEALER: TK-26UV

---- LF CONCRETE APPROACH SIMILAR TO DETAIL (2/SPD)

BG-12 CONCRETE CURB AND GUTTER PER DETAIL 5/SPD.

FOR LANDSCAPE AREAS. SEE SHEET LI.

OFF-STREET PARKING STALLS
STRIPING - 4" WIDE STALL LINES, USE HIGH
VISIBILITY WHITE PAINT.
SPACES PROVIDED

SPACES PROVIDED
(5) SERVICE POINTS
(4) 9'-0"x 20'-0"(MIN.) GENERAL PARKING
(6) 9'-0"x 20'-0"(MIN.) GENERAL PARKING 55*
(1) 9'-0"x 20'-0" ACCESSIBLE PARKING WITH
(1) MIN. 9'-0"x 20'-0" LOADING ZONE
(2) 11'-0"x 20'-0" AIR SPACE W/ 5' ACCESS LANE

I. A.D.A. ACCESSIBLE PARKING SPACE WITH LOADING ZONE. PROVIDE APPROPRIATE STRIPING AND PAVEMENT MARKINGS.

 4" WIDE, HIGH VISIBILITY, PAVEMENT STRIPING, LANE MARKINGS AND TEXT. COLOR: HC MARKINGS- BLUE, ALL OTHERS- YELLOW.

3. REPLACE EXISTING FUEL CANOPY (70' X 20')
(3) 3'-6"x 7'-0" CONCRETE ISLANDS W/ 6"
EXPOSURE WITH FUEL DISPENSERS.
DISPENSER PER OWNER.

4. 30" HT., 6" DIA. CONCRETE FILLED PIPE BOLLARD PER DETAIL 9/SPD.

5. 36" HT., 6" DIA. CONCRETE FILLED PIPE BOLLARD PER DETAIL I 2/SPD.

6. HC PVC BOLLARD SLEEVE PER OWNER. VAN ACCESS SIGNAGE AT 48" HT. STALL PARKING AT

7. TRASH ENCLOSURE BY OWNER

8. AIR MACHINE PER OWNER

9. SITE AREA LIGHT. SEE DETAIL G/SPD

10. STORM STRUCTURE. SEE SHEETS SP2-SP4 FOR

FURTHER STORM SEWER INFORMATION.

A. CATCH BASIN CURB INLET PER DETAIL I/SPD

B. TRENCH DRAIN PER DETAIL 5/SPD

B. TRENCH DRAIN PER DETAIL 5/SPDC. MANHOLE, FRAME AND VENTED COVER PER DETAIL 10/SPD

I I . PICNIC TABLES PER OWNER

I 2. 24' X 50' NEW FUEL CANOPY

(2) 3'-6"x 7'-0" CONCRETE ISLANDS W/ 6"

EXPOSURE WITH FUEL DISPENSERS.

DISPENSER PER OWNER.

NORTH SCALE: 1" = 20'

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

Know what's below.

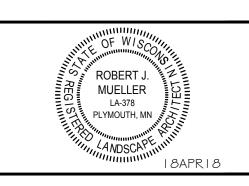
Call before you dig.

KWIK TRIP

KWIK Star

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P.O. BOX 2107
1626 OAK STREET
LACROSSE, WI 54602-2107
PH. (608) 781-8988
FAX (608) 781-8960

SITE PLANNING LANDSCAPE ARCHITECTURE 3030 Harbor Lane North, STE 131 Plymouth Minnesota 55447 763.383.8440



CONVENIENCE STORE 96
2402 W BROADWAY
MADISON, WISCONSIN

KEYNOTE

SITE

- 8JUNE 18 SUBMITTAL
- 17JULY 18 SUBMITTAL
- 25JULY 18 ADD CANOPY

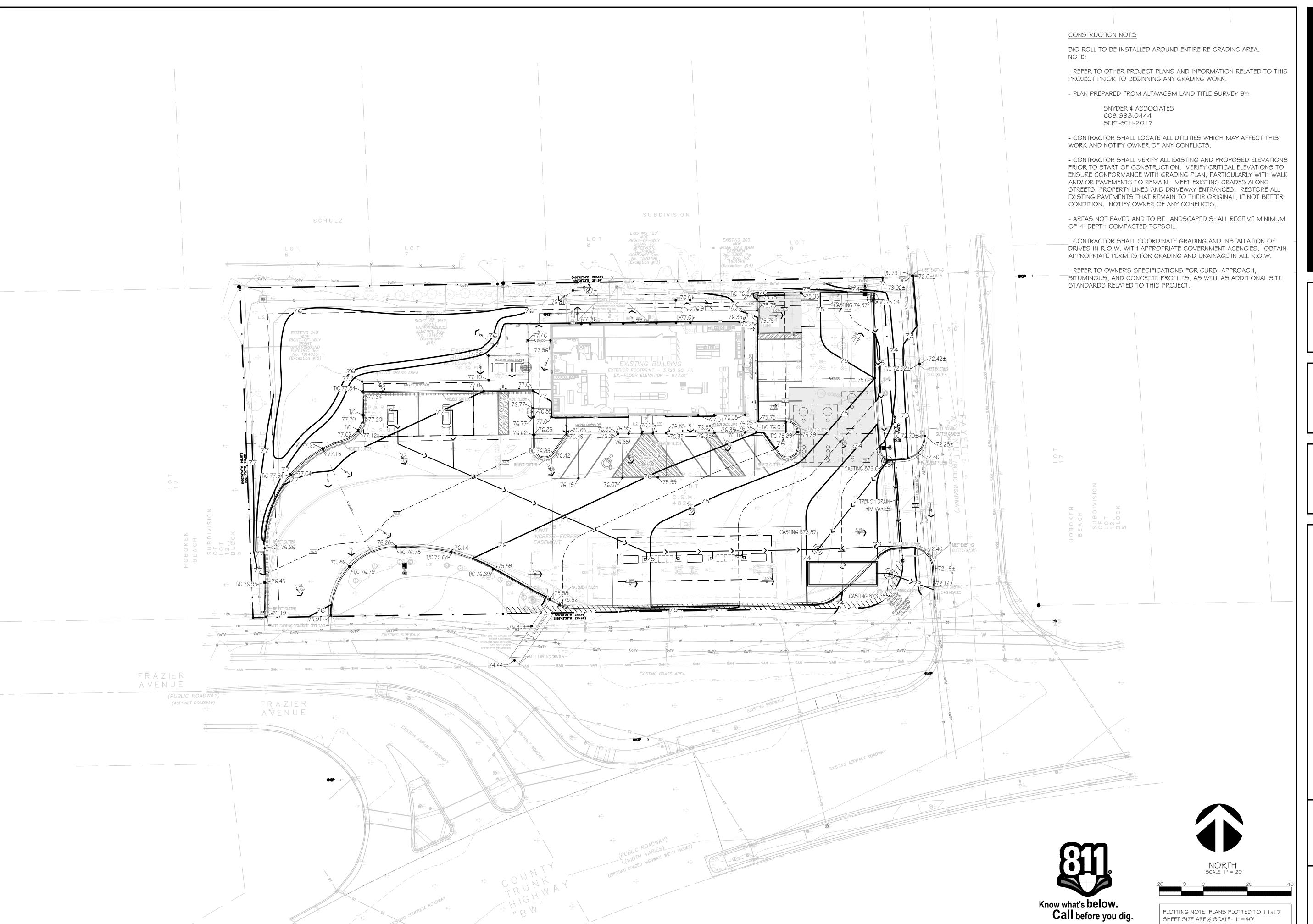
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SCALE GRAPHIC
PROJ. NO. 17965

DATE 18APR2018

SHEET

SP1.1

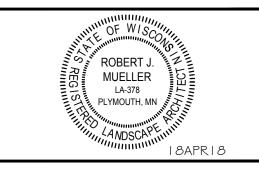


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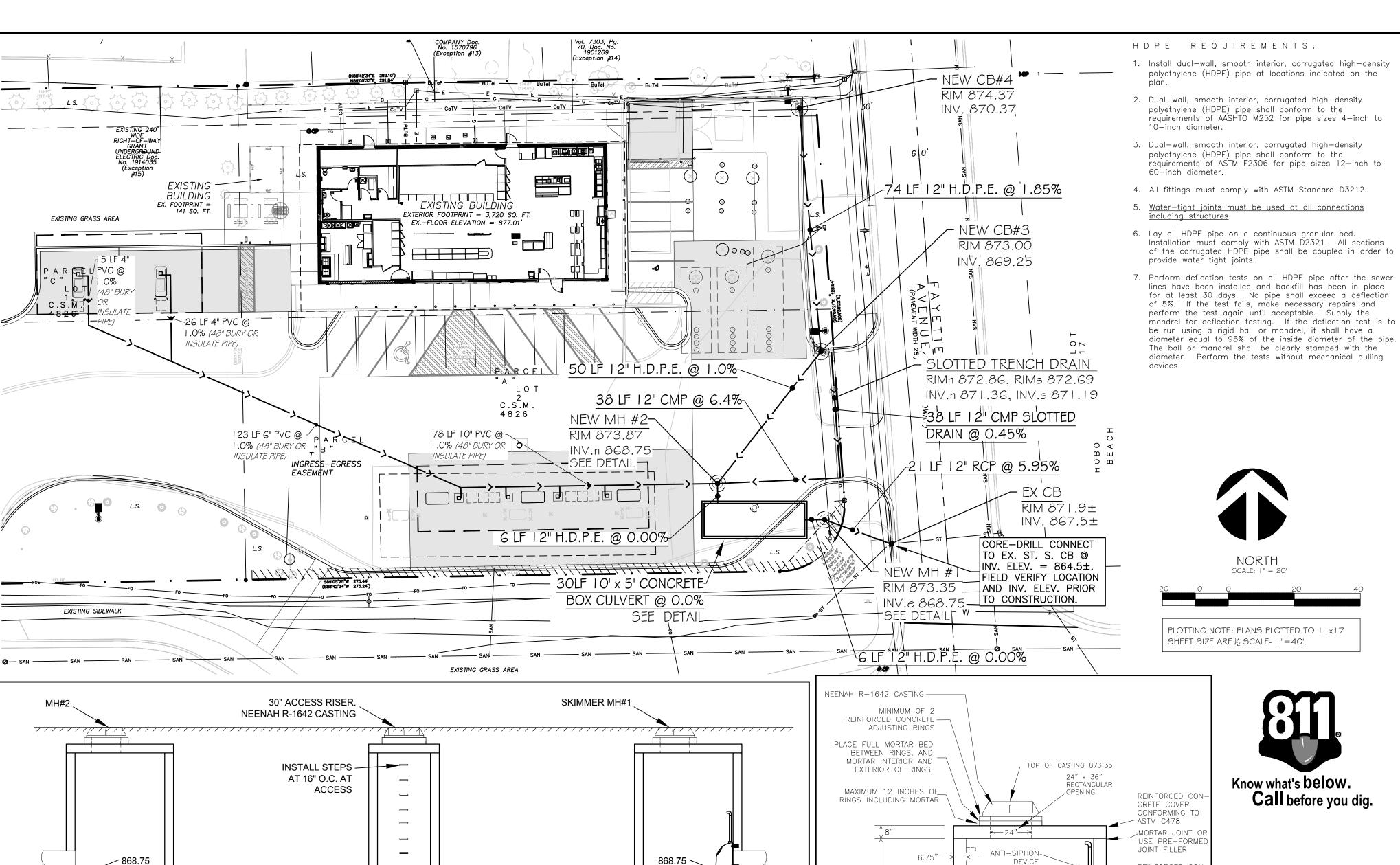


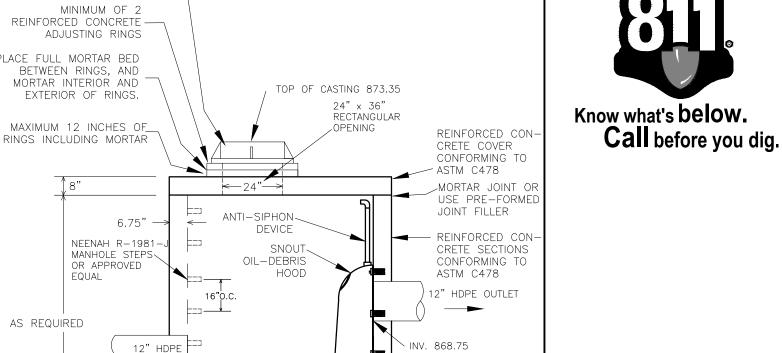
CONVENIENCE STORE 965
2402 W BROADWAY

O. DATE DESCRIPTION

- 8JUNE 18 SUBMITTAL
- 17JULY 18 ADD CANOPY

DRAWN BY	
SCALE	GRAPHIC
PROJ. NO.	17965
DATE	18APR2018
SHEET	SP2





OIL SKIMMER MH #1

STORM DRAINAGE:

JOINT TO HAVE DOUBLE LINE OF

BUTYL RUBBER SEALANT AROUND

CULVERT SECTIONS WILL BE

JOINED USING 1" O RODS.

BOX STRUCTURE TO BE INSTALLED AT

STRUCTURE APPLY AT THE INLET OF

A 0.0% GRADE. ALL ELEVATIONS SHOWN ON THE OUTLET END OF THE

Unless otherwise indicated, use reinforced, precast, concrete maintenance holes and catchbasins 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

12" HDPE

FLOW

Install catchbasin castings with specified top elevation at the front rim

SUBMERGED

INLET

12" CMP

FLOW

INV. 863.75 -

THE STRUCTURE.

ENTIRE PERIMETER.

NOTES:

ELEV. 868.25 \

JNV. 865.75

- All joints and connections to catchbasins or manholes shall be watertight. Joints between concrete structures and piping shall be made with mechanical joints (resilient rubber seal/boot and clamp) in conformance with ASTM C923, ASTM C654, or as otherwise permitted by the local authority. Cement mortar joints are <u>not</u> allowed unless otherwise permitted by the administrative authority.
- The building sewer starts 2 feet outside of the building. See Uniform Plumbing Code (UPC) part 715.1. Material installed within 2 feet of the building must be of materials approved for use inside of or within the
- <u>PVC Pipe (Outside of the Building)</u>: Use solid-core, SDR-35, ASTM D3034 Polyvinyl Chloride (PVC) Pipe for designated PVC storm sewer services 4 to 15-inches in diameter outside of the building. Use solid-core, SDR-35, ASTM F679 Polyvinyl Chloride (PVC) pipe for

- designated PVC storm sewer services 18 to 27-inches in diameter outside of the building. Joints for all storm 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 in accordance with Uniform Plumbing Code (UPC), part 605.13.2. 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.
- 6. <u>Cleanouts</u>: Install cleanouts on all roof drains in accordance with S.P.S 382.35 (3)(C)(1.). The distance between cleanouts in horizontal piping shall not exceed 100 feet for pipes 10-inches and under in size. Cleanouts 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

INV. 863.25 \

equal) over all cleanouts.

5' x 10' REINFORCED CONCRETE

UNDERGROUND STORAGE SYSTEM

- 7. <u>RCP</u>: 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.
- 8. <u>Testing</u>: 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 in accordance with UPC part 1109.0. 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.
- 9. <u>Draintile</u>: Perforated under-drains shall be slotted single wall corrugated HDPE. Install draintile with high permittivity circular knit polymeric filament filter sock per ASTM Ď6707-01.

REINFORCED CONCRETE

TO ASTM C478

BASE SLAB CONFORMING

10. Use Neenah R-3067-DR/DL casting with curb box, or approved equal, on CB #3 and CB#4. Casting shall include the "NO DUMPING. DRAINS TO RIVER." environmental notice.

12" RCP

INV. 863.75

*Not to Scale

NV. 865.75

OUTLET 🗡

SUBMERGED

FLOW

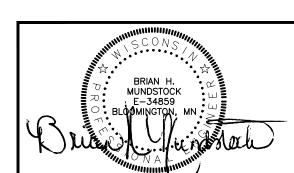
- 11. Use Neenah Foundry Co. R-1642 casting with self-sealing, solid, type B lid, or approved equal, on all storm sewer maintenance holes. Covers shall bear the "Storm Sewer" label.
- 12. <u>Tracer Wire</u>: Locating requirements a means to locate buried underground exterior non metallic sewers/mains 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. 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 green Rhino TriView Flex Test Stations, or approved equal, with black caps at each
- 13. 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.
- 14. 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.
- 15. Clean sediment and debris from sewers, sumps and stormwater basins prior to final owner acceptance.
- 16. Televise all existing lines prior to connection.

- GENERAL:
 - Existing boundary, location, topographic, and utility information shown on this plan is from a field survey by Snyder and Associates, Inc. dated 09/9/17. The Engineer is not responsible for inaccuracies related to the survey
 - 2. Perform all construction work in accordance with State and Local requirements.
 - 3. Comply with all applicable local, state, and federal safety regulations. Comply with the work safety practices specified by the Occupational Safety and Health Administration (OSHA). OSHA prohibits entry into "confined spaces," such as manholes and inlets (see 29 CFR Section 1910.146), without undertaking certain specific practices and procedures. Perform excavations in accordance with the requirements of O.S.H.A. 29 CFR, Part 1926, Subpart P, Excavations. Sloping or benching for excavations greater than 20 feet deep must be approved by a registered professional enginee (www.osha.gov).
 - 4. Safety is solely the responsibility of the Contractor, who is also solely responsible for the construction means, methods, techniques, sequences or procedures, and for safety precautions and programs in connection with the Work.
 - 5. The Engineer shall not have control over, charge of, or responsibility for the construction means, methods, techniques sequences or procedures, or for safety precautions and programs in connection with the Work. The Engineer's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or
 - Examine all local conditions at the site, and assume responsibility as to the grades, contours, and the character of the earth, existing conditions, and other items that may be encountered during excavation work above or below the existing grades. Review the drawings, specifications, and geotechnical report covering this work and become familiar with the anticipated site conditions.
 - 7. Refer to the architectural plans for building and stoop dimensions, site layout and dimensions, pavement sections and details, striping, and other site features.
 - A licensed surveyor shall perform construction staking. The Contractor shall provide and be responsible for the staking. Verify all plan and detail dimensions prior to construction staking. Stake the limits of walkways and curbing prior to valvebox, maintenance hole, and catchbasin installation. Adjust valvebox and maintenance hole locations in order to avoid conflicts with curb and gutter. Adjust catchbasin locations in order to align properly with curb and
 - 9. Provide temporary fences, barricades, coverings, and other protections in order to preserve existing items to remain, and to prevent injury or damage to person or property.
 - 10. Provide all traffic control required in order to construct the proposed improvements. Traffic control design and associated government approvals are the responsibility of the Contractor. Comply with local authorities, the latest version of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and the Wisconsin Manua on Uniform Traffic Control Devices Supplement to the MUTCD.
 - 11. Connect to existing sanitary sewer MH's by coredrilling. Connect to existing storm sewer MH's by either sawcutting of coredrilling. Use saws or drills that provide water to the blade. Meet all City standards and specifications for the t 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.
 - 12. All other existing existing sewer and watermain pipes that are to be abandoned shall either be removed, or complete filled with sand or lean mix grout.
 - 13. 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 Guideline for the Collection and Depiction of Existing Subsurface Utility Data.
 - 14. 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.
 - 15. The Contractor is solely responsible for all utility locates. 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 locator 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.
 - 16. 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.
 - 17. 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.
 - 18. 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.
 - 19. Straight line saw—cut existing bituminous or concrete surfacing at the perimeter of pavement removal areas. Use saws that provide water to the blade. Do not allow the slurry produced by this process to be tracked outside of the immediate work area or discharged into the sewer system. Tack and match all connections to existing bituminous
 - 20. Relocate overhead power, telephone, and cable lines as required. Seal and report any existing unused on—site wells
 - 21. All materials required for this work shall be new material conforming to the requirements for class, kind, grade, size, auality, 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
 - 22. Reconstruct driveways and patch street to match existing pavement section and grade. Sod right-of-way. The work area shown is general and may need to be adjusted in the field.
 - 23. Restore the public right—of—way at temporary construction entrance locations. 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.
 - 24. Protect sub grades from damage by surface water runoff.
 - 25. When sawing or drilling concrete or masonry, use saws that provide water to the blade. Do not allow the slurry produced by this process to be tracked outside of the immediate work area or discharged into the sewer system.
 - 26. Adjust all curb stops, valve boxes, maintenance hole castings, catchbasin castings, cleanout covers, and similar items
 - 27. 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
 - 28. Obtain and pay for all permits, tests, inspections, etc. required by agencies that have jurisdiction over the project including the NPDES permit from the State. 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.
 - 29. Obtain permits from the City for work in the public right—of—way.
 - 30. Refer to the geotechnical report by the Soils Engineer for dewatering requirements.
 - 31. 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 o 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.
 - 32. Construct sanitary sewer, watermain, and storm sewer utilities in accordance with the Standard Specifications for Sewe and Water Construction in Wisconsin, Sixth Edition, or the latest revised edition.
 - 33. <u>Tracer Wire</u>: 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.
 - 34. See architectural for building waterproofing and foundation drainage.
 - 35. Secure and deliver to the Owner as—built information showing locations, top, and invert elevations of maintenance holes, catchbasins, cleanouts, inlet and outlet pipes, valves, hydrants, and related structures. Location ties shall be permanent landmarks or buildings.
 - 36. Place #3 rebar at 3' on center in all 6" thick concrete pavement locations. Place #4 rebar at 3' on center in all 8" thick concrete pavement locations.
 - 37. Place $\#4 \times 2'-0$ " tie bar at 3' on center in all concrete curb and gutter.



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





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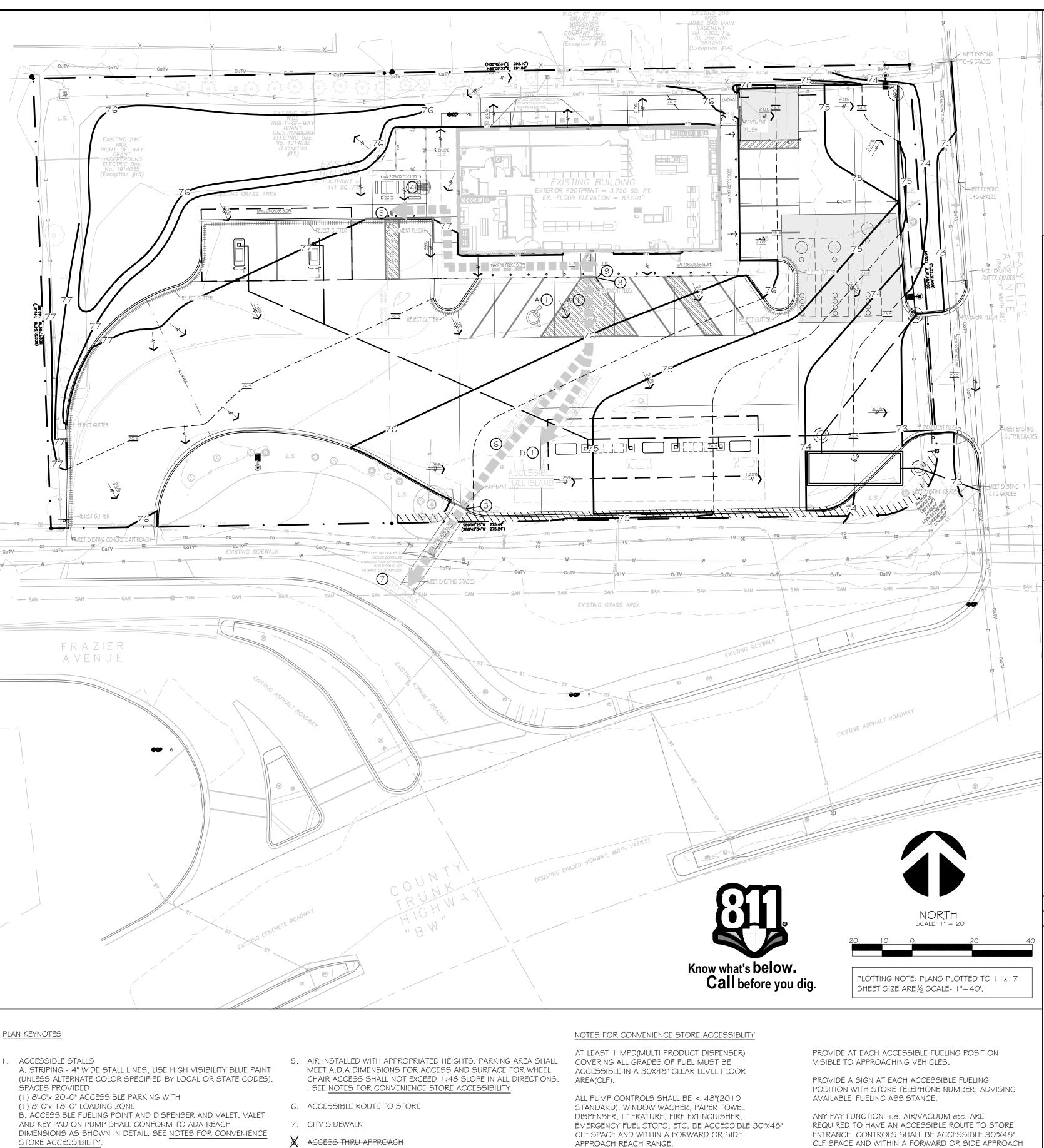
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SP3



APPROACH REACH RANGE.

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

CLF SPACE AND WITHIN A FORWARD OR SIDE APPROACH REACH RANGE.

NOTES:

-REFER TO THE DOCUMENT FROM THE DEPARTMENT OF JUSTICE ON "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN". CONTRACTOR SHALL REFERENCE CURRENT A.D.A. GUIDLINES 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 HAS AUTOMATIC DOOR OPENER SYSTEM DESIGNED TO COMPLY WITH ALL ACCESS CODES AND LAWS. ENTRANCE DOORS FOR ACCESSIBLE ROUTES WILL HAVE A MINIMUM CLEAR OPENING OF

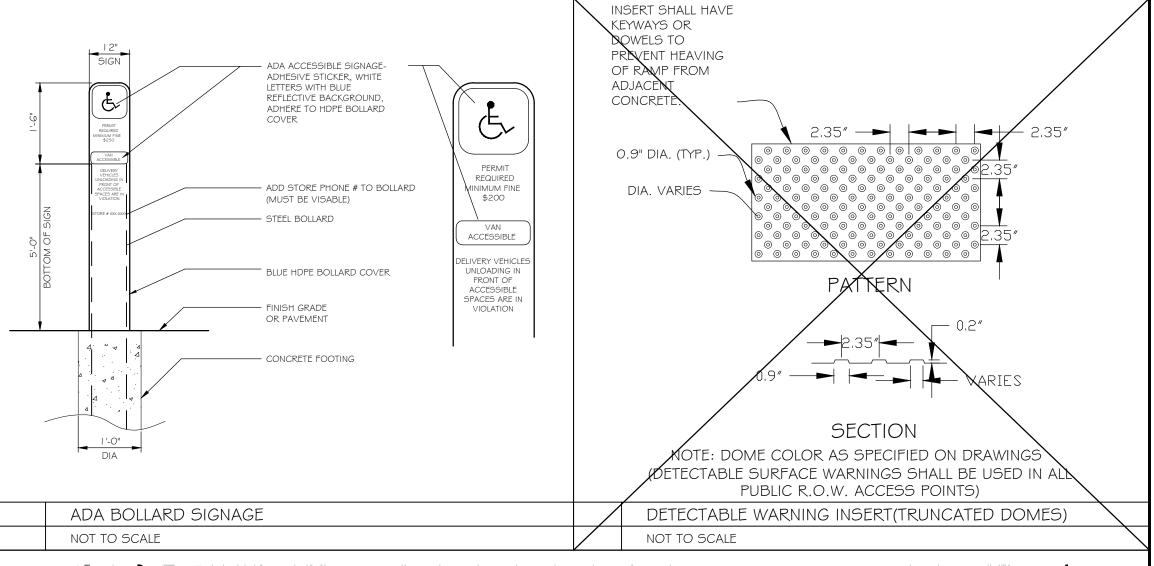
-STORE FRONTS WILL PROVIDE FLUSH PAVEMENTS ALONG ACCESSIBLE ROUTES WITH PROTECTIVE SECURITY BOLLARDS INDICATED AND SPACED BETWEEN PARKING SURFACES AND BUILDING WALK PER PLAN.

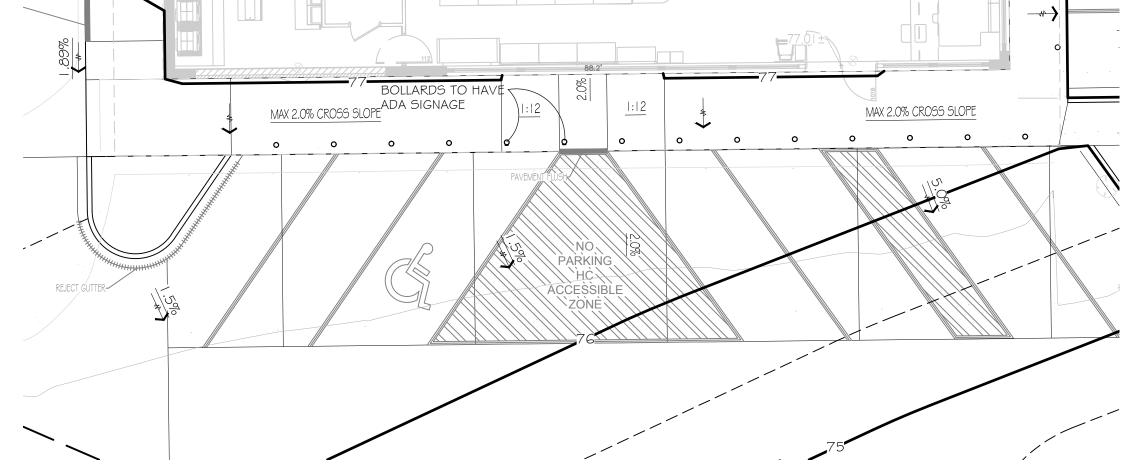
-NO OBJECTS OR DISPLAYS SHOULD PROTRUDE INTO THE MINIMUM CLEAR SPACE OF THE ACCESSIBLE ROUTES TO THE STORE ENTRANCE. THIS WILL INCLUDE SEASONAL DISPLAY VENDING AREAS AS WELL AS OTHER OUTDOOR STORAGE UNITS FOR PROPANE AND ICE, ETC.

-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 REQIORED 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.

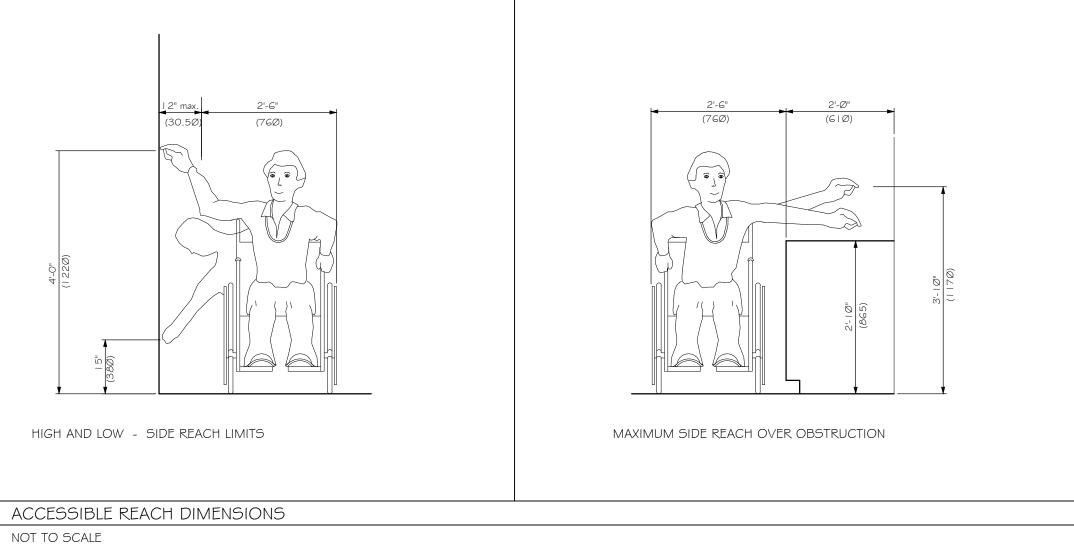
-IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY WITH THE DISIGNATION OF I "VAN ACCESSIBLE" IN EVERY 8 ACCESSIBLE SPACES ON SITE.





VAN ACCESSIBLE PARKING PLAN

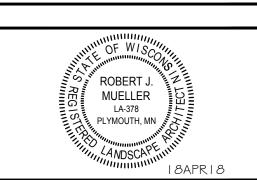
NOT TO SCALE



KWIK TRIP

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

3030 Harbor Lane North, STE 131 Plymouth Minnesota 55447 763.383.8400



6 TORE A **△** 2402 W BROADWAY MADISON, WISCONS ONVENIENC

C DATE DESCRIPTION 8JUNE 18 SUBMITTAL 17JULY 18 SUBMITTAL

18APR2018 SPA

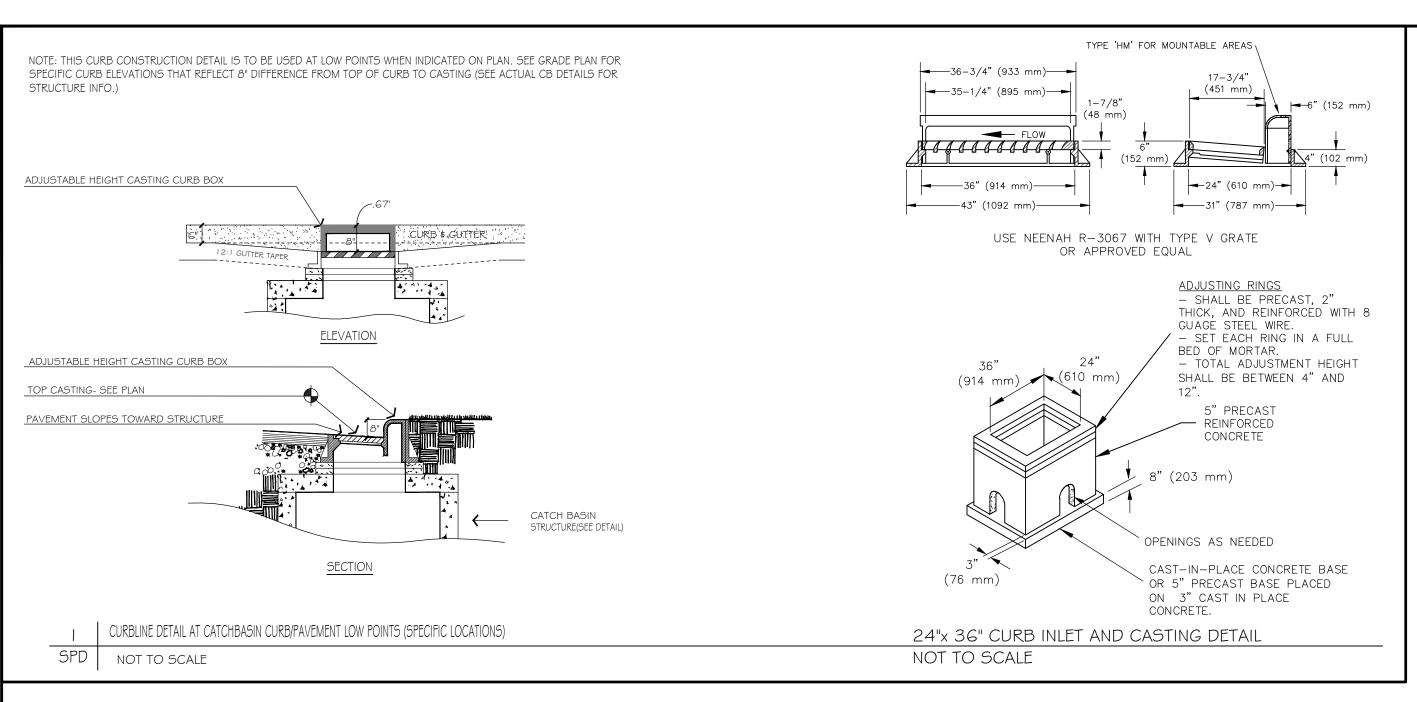
TRUNCATED DOME INSERT. COLOR: BURGUNDY. DIMENSIONS OF INSERT AS DETERMINED BY PATH WIDTH TO ENSURE COMPLETE DETECTION ZONE IN LINE OF TRAVEL.

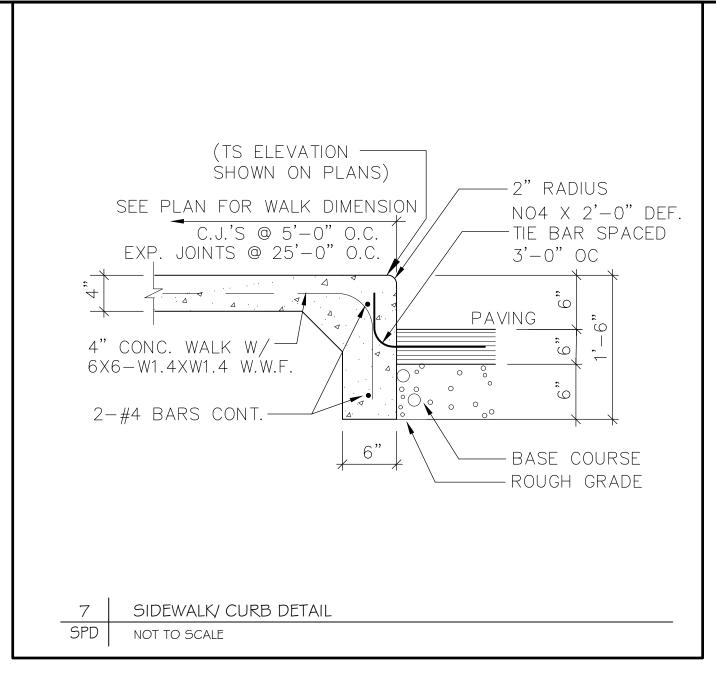
MAX. 2% CROSS SLOPE (1:48)

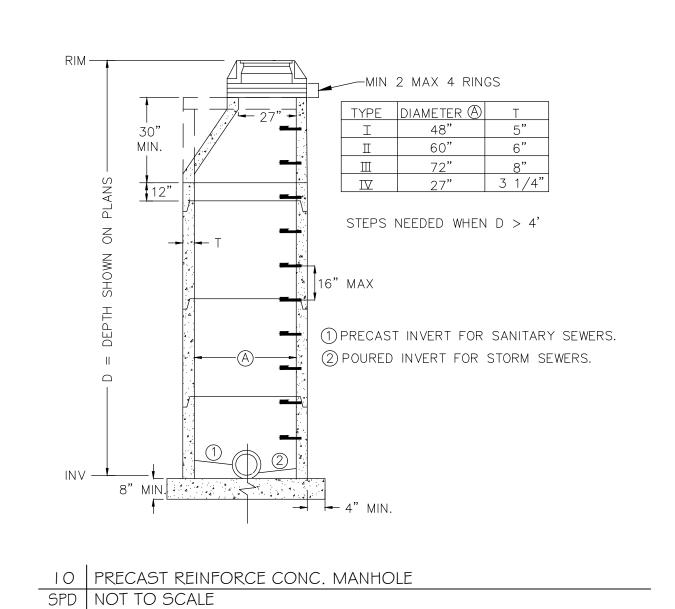
9. CURB RAMP- RAMP SLOPE MAX 1:12

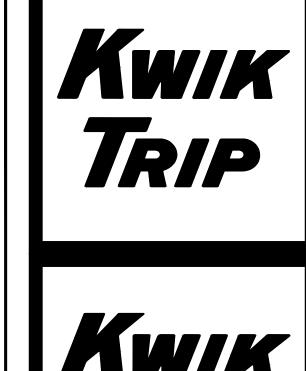
SIDE FLARE SLOPE MAX. 1:10

- 3. PAVEMENTS FLUSH FOR ACCESSIBILITY.
- PICNIC TABLE W/ ACCESSIBLE PLACEMENT PROVIDE OWNER. PROVIDE TRASH CONTAINER





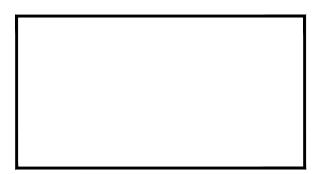


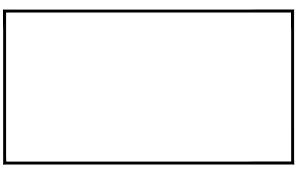


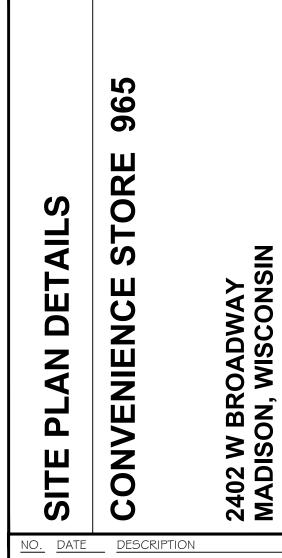
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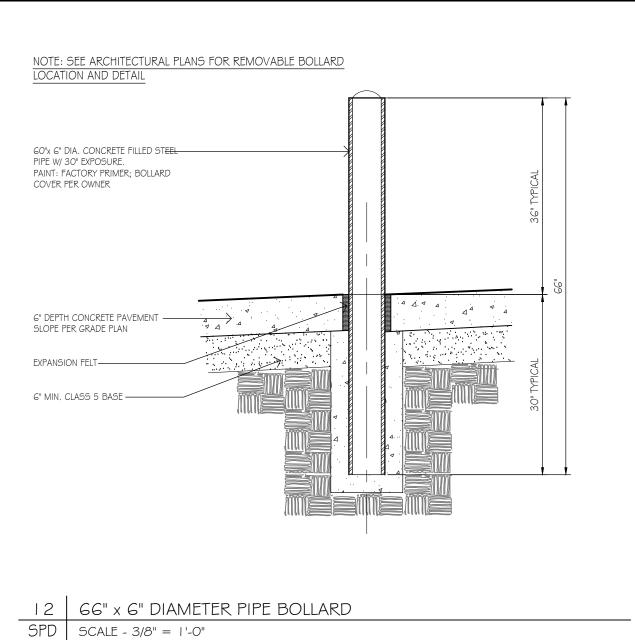




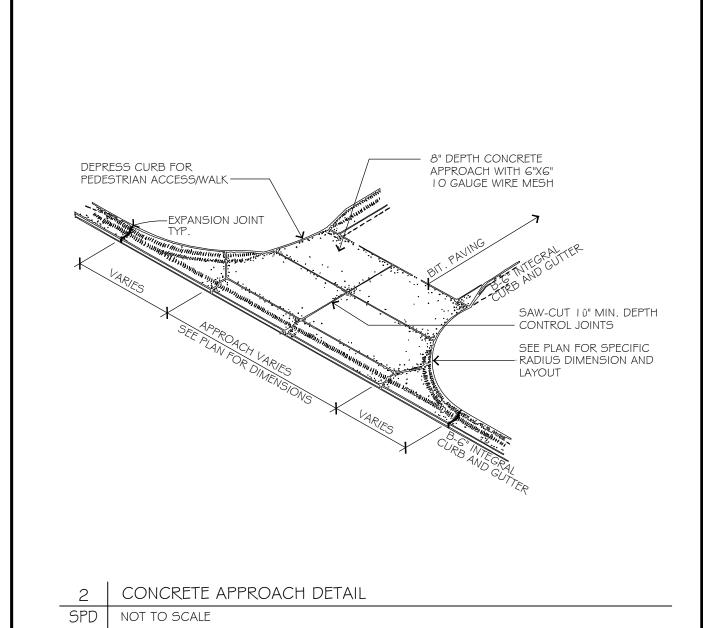
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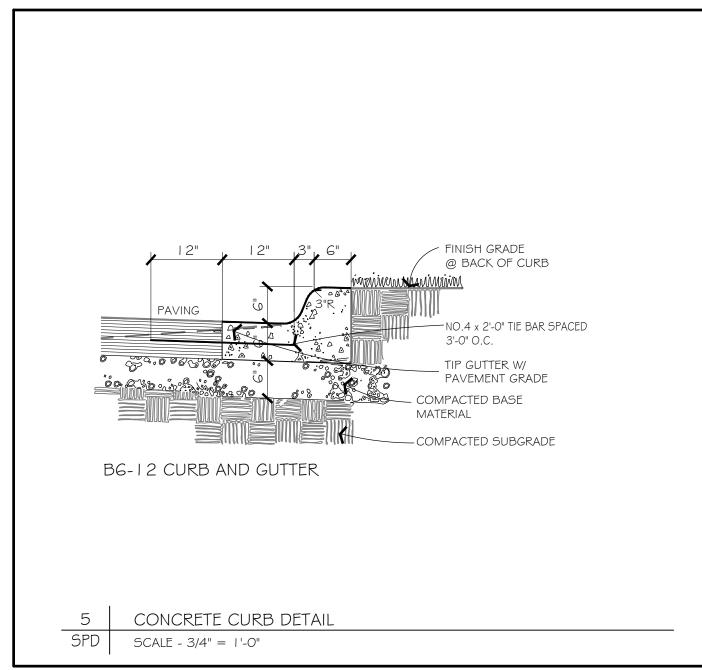
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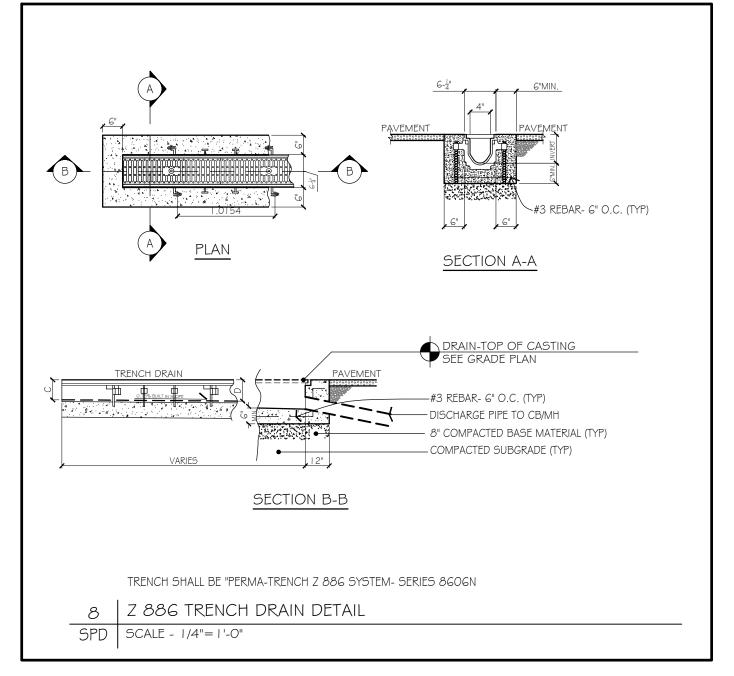
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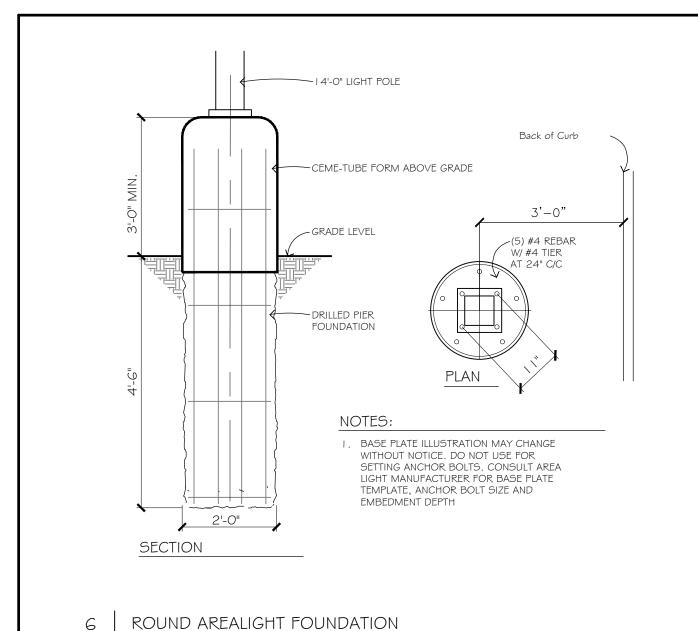


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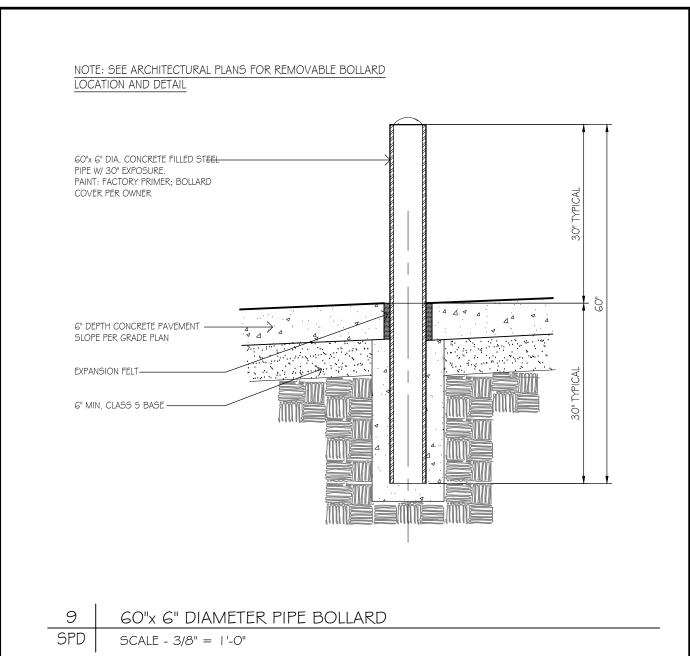


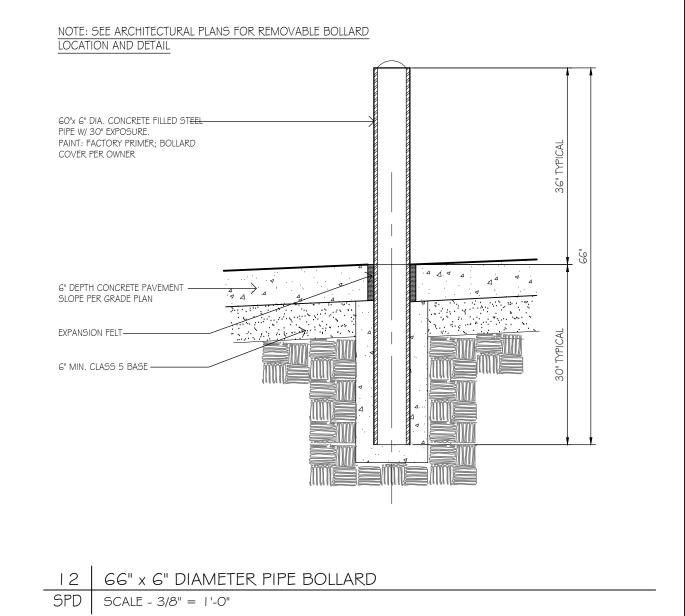


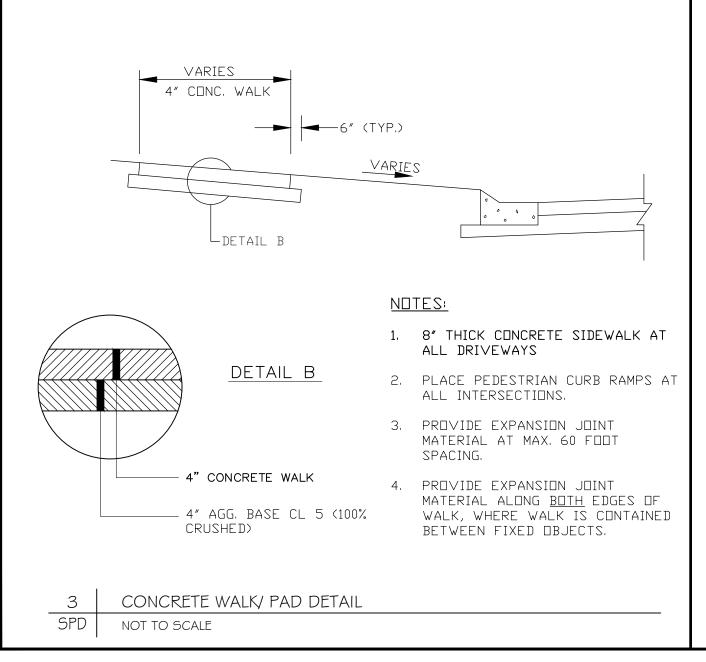


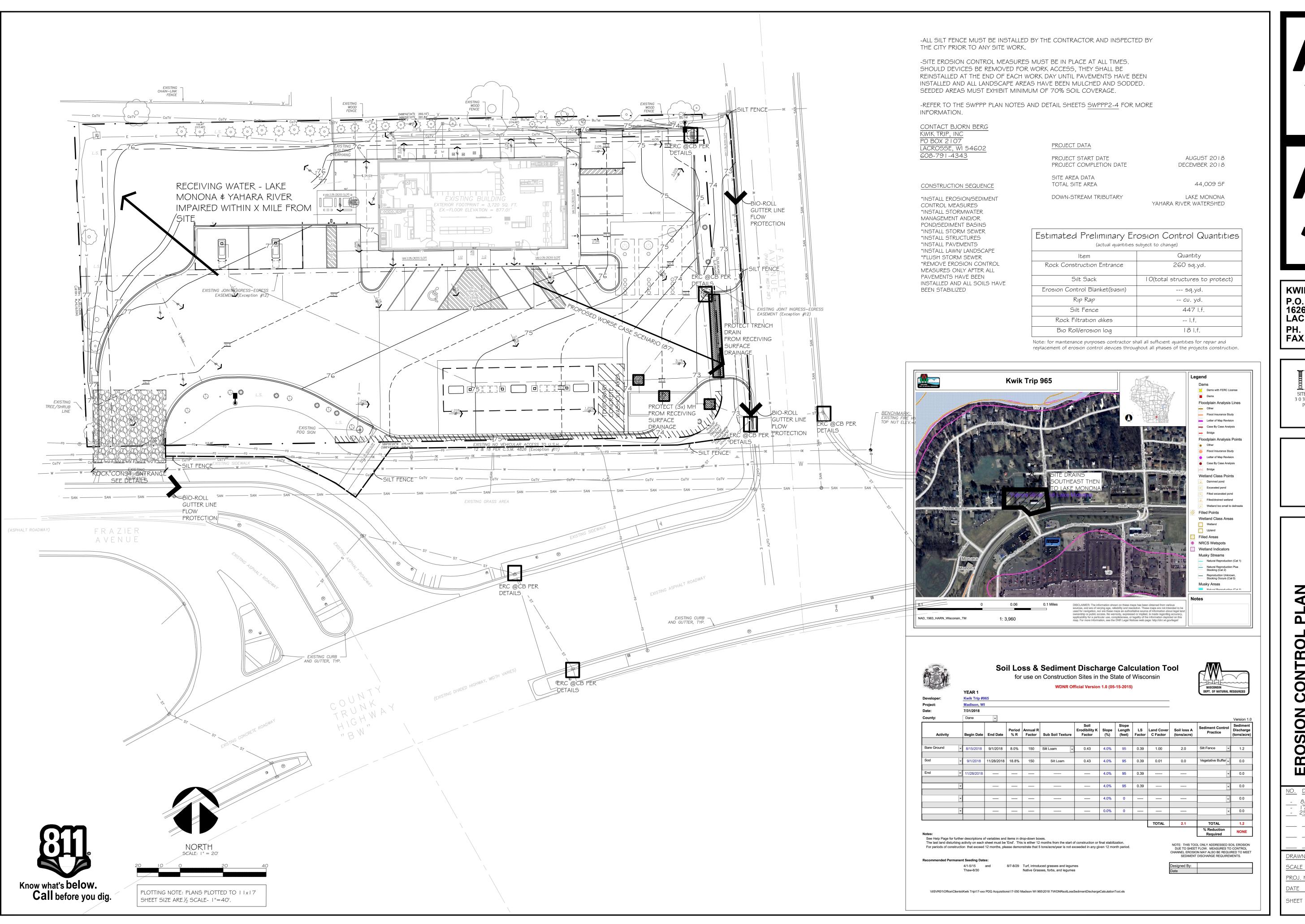


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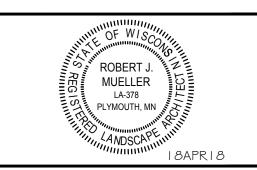


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LACROSSE, WI 54602-2107
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FAX (608) 781-8960





ROSION CONTROL PLAN
ONVENIENCE STORE 965

CONVENIENCE S
2402 W BROADWAY
MADISON, WISCONSIN

NO. DATE DESCRIPTION

- 8JUNE 18 SUBMITTAL
- 17JULY 18 SUBMITTAL
- 25JULY 18 ADD CANOPY

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SWP1

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 SP3, SP3. I and SP3.2, 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 entities 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:

SITE INVESTIGATION. INSTALLATION. IMPLIMENTATION

- 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 susceptable 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
- Following initial soil disturbance or re-disturbance, complete permanent or temporary stabilization against erosion due to rain. wind, and running water within 7 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:

I. 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

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

- 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 mechanized 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 stored 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:

nlet Sediment Control Protection Devices: The following area 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:

799 Theis Drive Shakopee, MN, 55379 Phone (952) 233-3055 or approved equal

b. Silt Sack manufactured by: ACF ENVIRONMENTAL 283 | 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

e. Inflatable drain plugs by Interstate Products www.interstateproducts.com or approved equal

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.

Install and maintain per WIDNR Conservation Practice Standard 1056.

Install silt fence along the contour (on a level horizontal plane) with the ends turned up (J-hooks) in order to help pond water behind the fence. Install the silt fence on the uphill side of the support posts. Provide a post spacing of 1.2 m (4 feet) or less. Drive posts at least 0.6 m (2 feet) into the ground. Anchor the silt fence fabric in a trench at least 152 mm (6 inches) deep and 152 mm (6 inches) wide dug on the upslope side of the support posts. Lay the fabric in the trench and then backfill and compact with a vibratory plate compactor. Make any splices in the fabric at a fence post. At splices, overlap the fabric at least 152 mm (6 inches), fold it over, and securely fasten it to the fence post. Silt fence supporting posts shall be 51 mm (2 inch) square or larger hardwood, pine, or standard T- or U-section steel posts. T- or U-section steel posts shall weigh not less than 1.8602 kg per meter (1.25 lb per lineal foot). Posts shall have a minimum length of 1524 mm (5 feet). Posts shall have projections to facilitate fastening the fabric and prevent slippage. Geotextile fabric shall meet the requirements of WIDOT Standard Specification 628 for preassembled silt fence, furnished in a continuous roll in order to avoid splices. Geotextile fabric shall be uniform in texture and appearance and have no defects, flaws, or tears. The fabric shall contain sufficient ultraviolet (UV) ray inhibitor and stabilizers to provide a minimum two-year service life outdoors. Fabric color shall be international orange. In high traffic areas contractor shall reinforce silt fence with wire fencing and metal posts. extreme circumstances will require temporary concrete median sections to support material backing of stock

Install siltfence, or other effective sediment controls, around all temporary soil stockpiles. Locate soil or dirt stockpiles containing more than 10 cubic yards of material such that the downslope drainage length is no less than 8 m (25 feet) from the toe of the pile to a roadway or drainage channel. If remaining for more than seven days, stabilize the stockpiles by mulching, vegetative cover, tarps, or other means. Control erosion from all stockpiles by placing silt fence barriers around the piles. During street repair, cover construction soil or dirt stockpiles located closer than 8 m (25 feet) to a roadway or drainage channel with tarps, and protect storm sewer inlets with silt sacks or staked siltfence. Do not stock pile soil or material near catch basins or drainage ways.

Stone Tracking Pad (Temporary Rock Construction Entrance:

Install and maintain per WIDNR Conservation Practice Standard 1057. Use 3inch to 6" diameter rock. Place the aggregate in a layer at least 300 mm (12 inches) thick across the entire width of the entrance. Extend the rock entrance at least 15 m (50 feet) into the construction zone. Use a WIDOT Type R permeable geotextile fabric material beneath the aggregate in order to prevent migration of soil into the rock from below. Maintain the entrance in a condition that will prevent tracking or flowing of sediment onto paved roadways. Provide periodic top dressing with additional stone as required. 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 related 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 flocculant agent may be required.

For more information and materials go to by Interstate Products www.interstateproducts.com

INSPECTIONS-MAINTENANCE-DAILY RECORD-AMEND THE SWPP PLAN

- I. 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 greenspace). Repair any rilling, gully formation, or washouts. After final establishment of permanent stabilization, remove all temporary synthetic, structural, and non-biodegradable 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 catchbasins, 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 catchbasins) 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 (I 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.

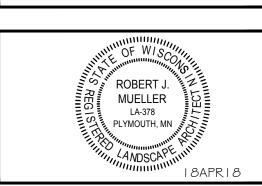
In areas where irrigation is to be installed, contractor shall work in zones to finish grade and install the system in zones. Note-Erosion control measures shall remain in place until soils have been stabilized with sod or seeded areas that exhibit minimum of 70% lawn vegetative coverage. If silt fence 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

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 OWENER AND DOCUMENTED AS PART OF THE SWPP

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





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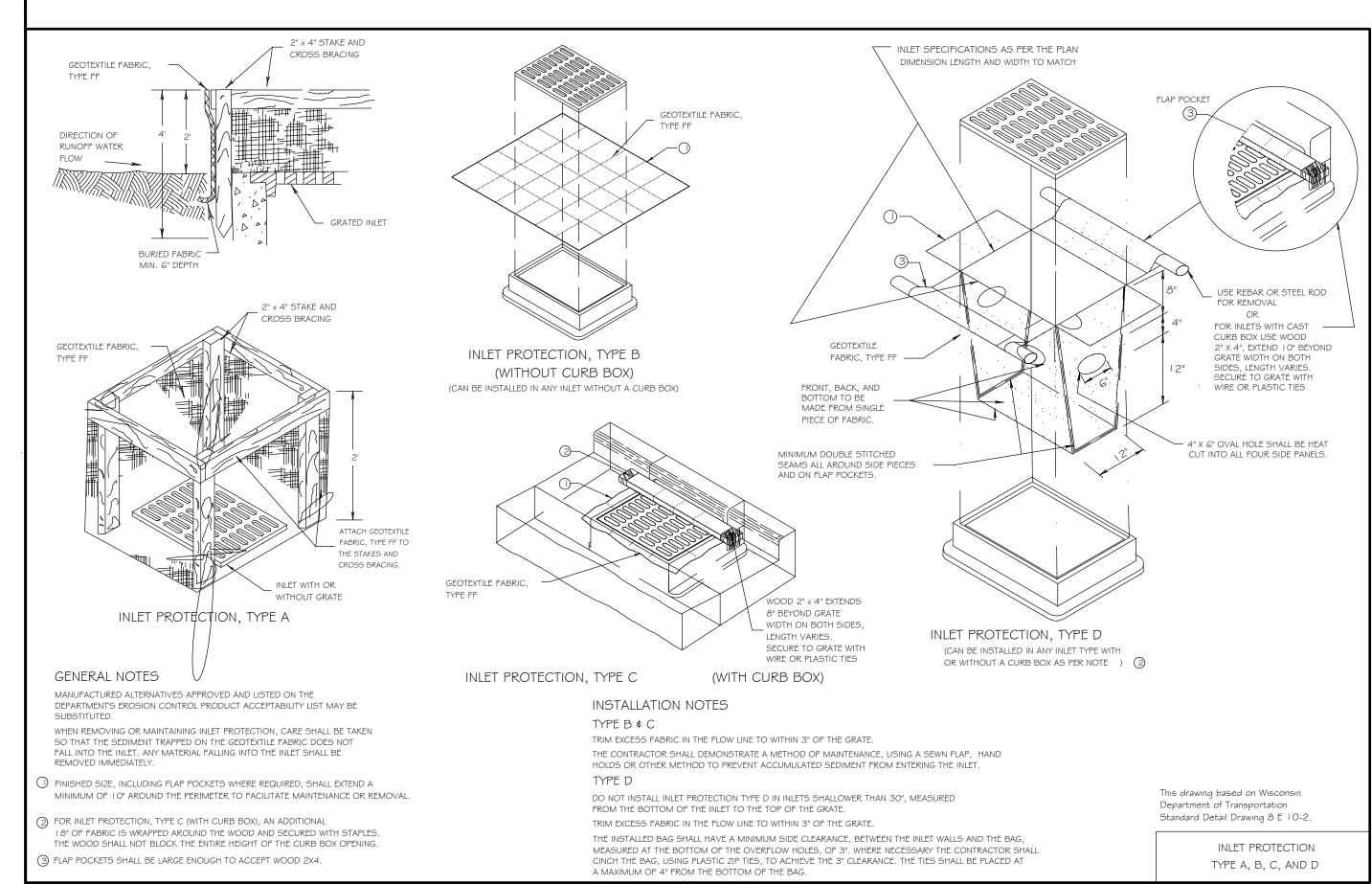
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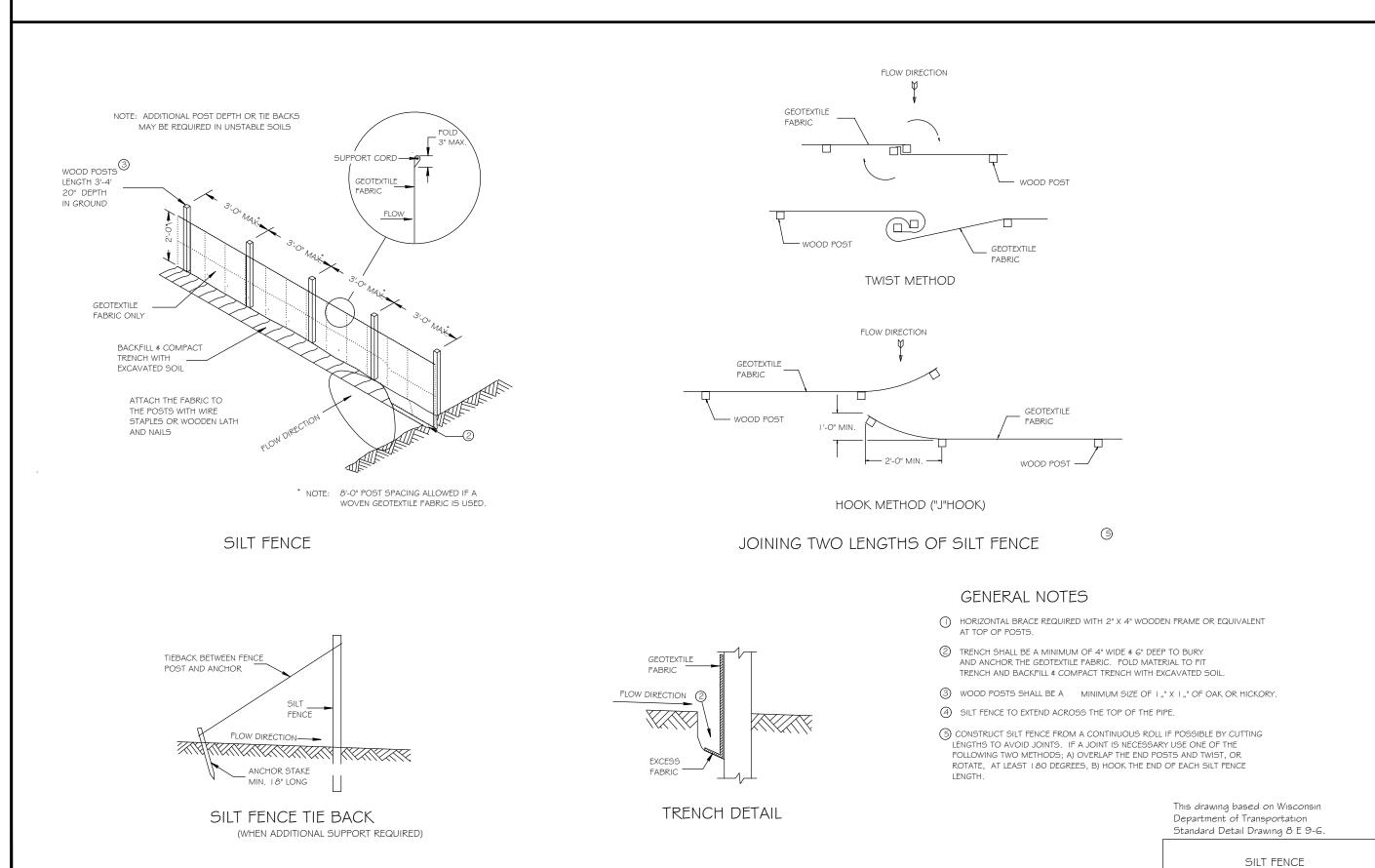
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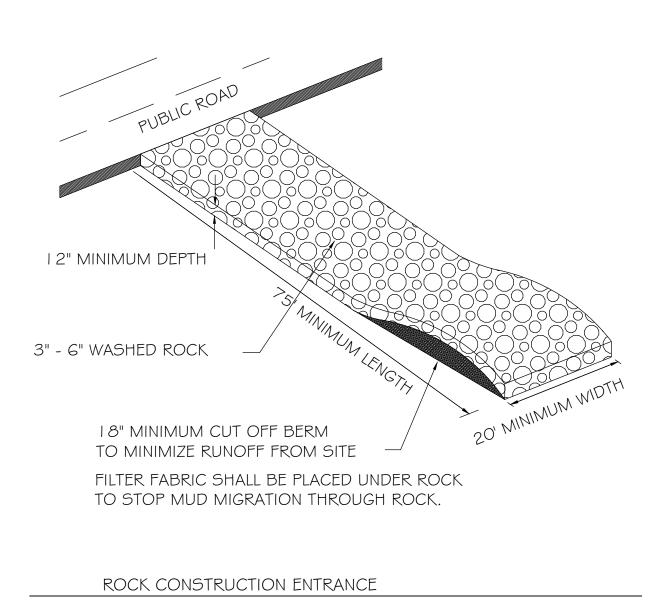
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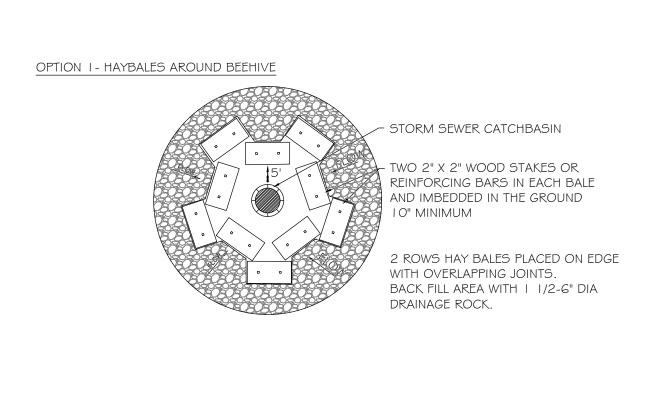
ALL EROSION CONTROL MEASURES TO BE INSTALLED AND MAINTAINED PER WDNR STANDARDS

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

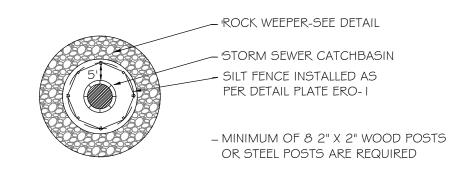




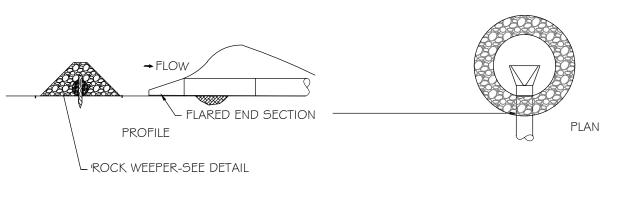




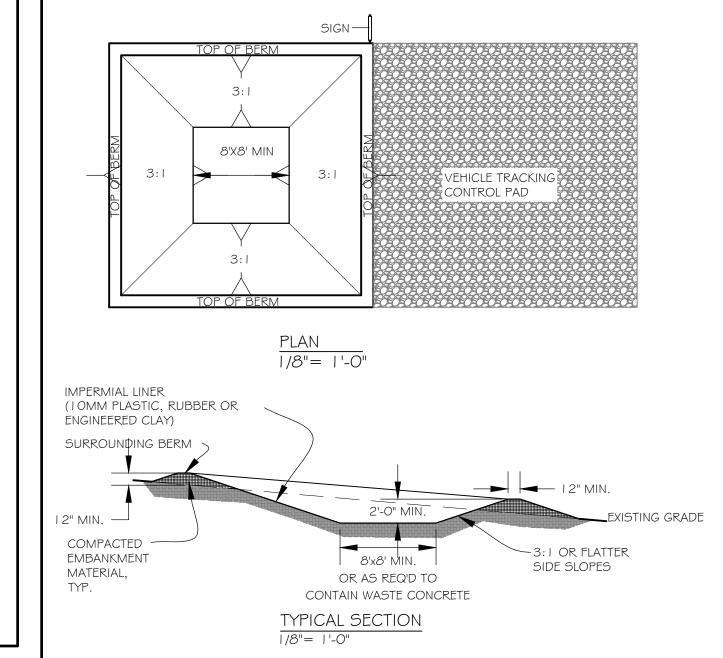
OPTION 2- SILT FENCE CONTROL AROUND BEEHIVE



C. ROCK WEEPER PROTECTION AT FLARED END SECTION/OUTLET PIPE-SEE ROCK WEEPER DETAIL FOR INSTALLATION DIKE SHALL BE MIN. 6" HIGHER THAN DIAMETER OF PIPE



BEE-HIVE CASTING AND FLARED END SECTION EROSION/SEDIMENT CONTROL



- 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.)
- THE CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- VEHICLE TRACKING CONTROL PAD IS REQ'D AT THE ACCESS POINT(S).
- 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.
- . EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

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

CONCRETE WASHOUT AREA

DIRECTED BY GOVERNING AUTHORITY).

4. BACKFILL WITH NATURAL SOIL AND COMPACT

5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT

EROSION CONTROL BLANKET INSTALLATION

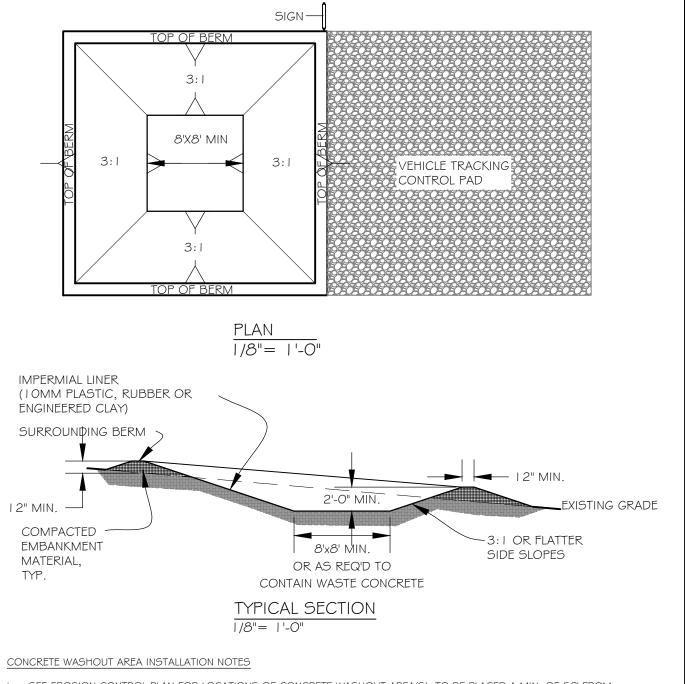
ANCHOR TRENCH

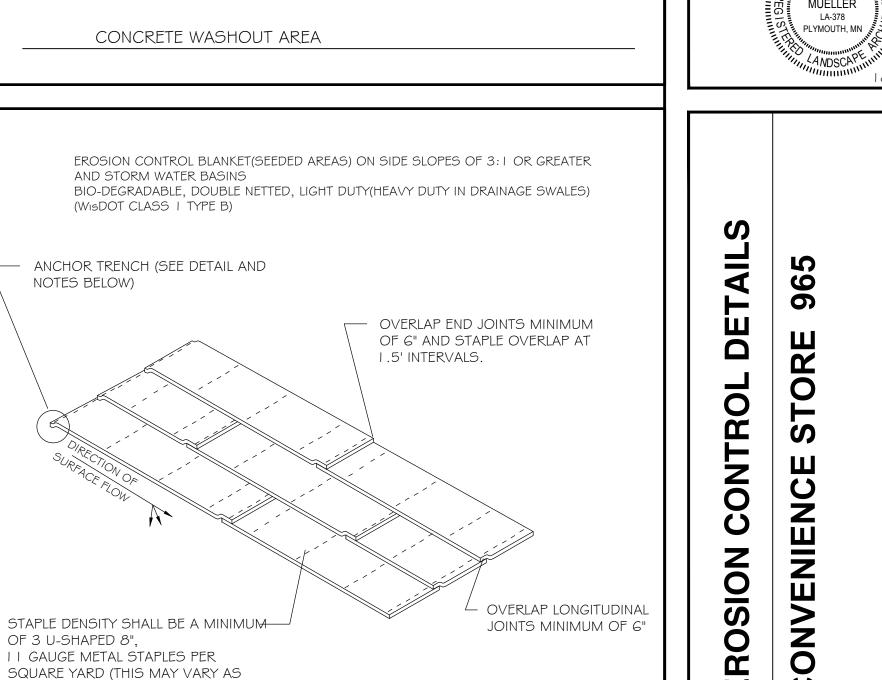
. DIG 6" X 6" TRENCH

2. LAY BLANKET IN TRENCH

AN ANCHOR TRENCH

3. STAPLE AT 1.5' INTERVALS





1' TO 3'

18APR201 SWP3

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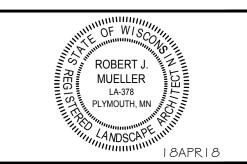
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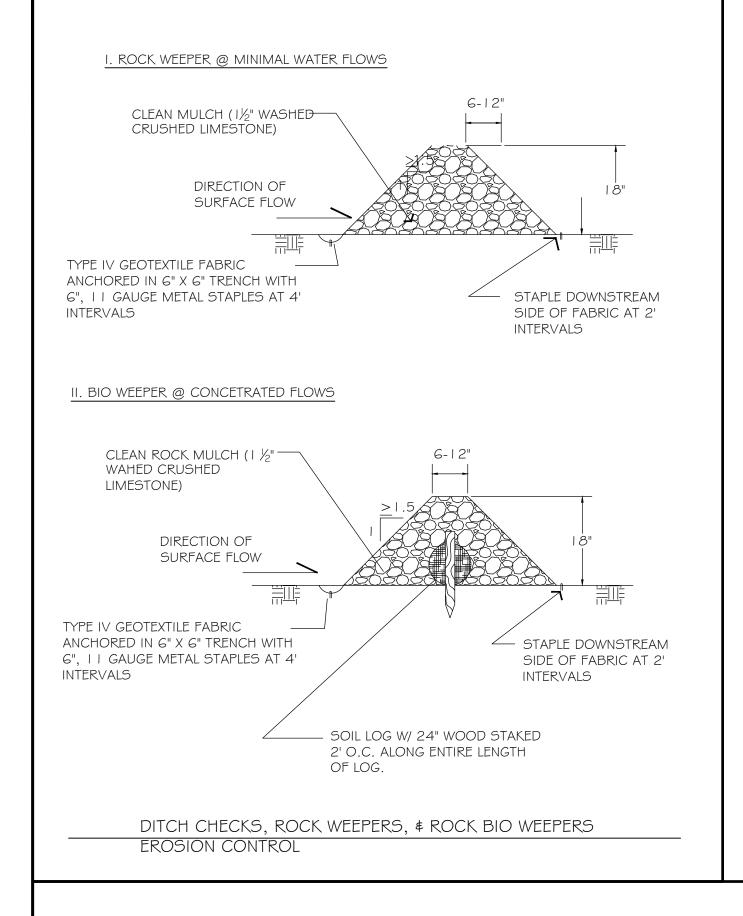
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KWIK TRIP, Inc. P.O. BOX 2107 1626 OAK STREET LACROSSE, WI 54602-2107 PH. (608) 781-8988 FAX (608) 781-8960







Channel Erosion Mat

Wisconsin Department of Natural Resources Conservation Practice Standard

A protective soil cover of straw, wood, coconut fiber or other suitable plant residue, or plastic fibers formed into a mat, usually with a plastic or biodegradable mesh on one or both sides. Erosion mats are rolled products available in many varieties and combination of materials and with varying life spans.

II. Purpose

The purpose of this practice is to protect the channel from erosion or act as turf reinforcement during and after the establishment of grass or other vegetation in a channel. This practice applies to both Erosion Control Revegative Mats (ECRM1) and Turf-Reinforcement Mats (TRM).

III. Conditions Where Practice Applies

This standard applies where runoff channelizes in intermittent flow and vegetation is to be established. Some products may have limited applicability in projects adjacent to navigable

IV. Federal, State, and Local Laws Users of this standard shall be aware of applicable federal, state, and local laws, rules, regulations, or permit requirements governing the use and placement of erosion mat. This standard does not contain the text of federal, state, or local laws.

V. Criteria

This section establishes the minimum standards for design, installation and performance requirements. To complete the shear calculations, a 2 year, 24 hour storm event shall be used to calculate depth of flows for an ECRM. For sizing a TRM, use the depth of flow corresponding to the maximum design capacity of the channel.

Only mats listed in the Wisconsin Department of Transportation (WisDOT) Erosion Control Product Acceptability List (PAL) will be accepted for use in this standard.

To differentiate applications WisDOT organizes erosion mats into three classes of mats, which are further broken down into various Types.

- - 3. The mat shall be in firm and continuous
 - recommendations. 4. TRM shall be installed in conjunction with the topsoiling operation and shall

D. Installation

5. At time of installation, document the manufacturer and mat type by saving material labels and manufacturer's installation instructions. Retain this documentation until the site is stabilized.

VI. Considerations

for use in environmentally sensitive

areas where plastic netting is

C. Class III: A permanent 100% synthetic

ECRM or TRM. Class I, Type B erosion

mat or Class II, Type B or C erosion mat

channels where the calculated (design)

shear stress of 2.0 lbs/ft² or less.

2. Type B - A TRM for use in channels

3. Type C - A TRM for use in channels

4. Type D - A TRM for use in channels

where the calculated (design) shear

topsoiling, fertilizing, liming, and

2. Erosion mats shall extend for whichever

is greater: upslope one-foot minimum

vertically from the ditch bottom or δ

inches higher than the design flow

contact with the soil. It shall be

anchored, overlapped, staked and

entrenched per the manufacturer's

be followed by ECRM installation.

where the calculated (design) shear

stress of 2.0 lbs/ft² or less.

stress of 3.5 lbs/ft² or less.

stress of 5.0 lbs/ft² or less.

seeding is complete.

where the calculated (design) shear

must be placed over a soil filled TRM.

Type A – An ECRM for use in

inappropriate.

- A. Erosion mats shall be selected so that they last long enough for the grass or other vegetation to become densely established.
- B. Consider using Class II, Type C mats adjacent to waterways where trapping small animals is to be avoided.
- C. Class III TRM may be appropriate as a replacement for riprap as a channel liner. Check the shear stress criteria for the channel to determine mat applicability.
- D. Once a gully has formed in a channel, it is difficult to stabilize due to loss of soil structure. Even when the gully is filled with topsoil and reseeded, the soil has a tendency to dislodge in the same pattern. If gully formation continues to be a problem the design should be reevaluated, including other mat classes

or riprap.

- E. It may be difficult to establish permanent vegetation and adequate erosion protection in a channel with continuous flow. Consider riprap or planting wetland species with an ECRM.
- Documentation of materials used, monitoring logs, project diary, and weekly inspection forms including erosion and stormwater managemen plans, should be provided to the authority charged with long term

maintenance of the site.

- G. Channel cross sections may be parabolic, v-shaped or trapezoidal. The use of "V" channels is generally discouraged due to erosion problems
- H. To help determine the appropriate channel liner, designers can refer to the design matrix in the back of the WisDOT PAL. However, for channels not conforming to the typical section shown in the channel matrix or having a depth of flow greater than 6 inches (150 mm), the designer will need to design

for an appropriate channel liner. One

way to do this is to use the "tractive force" method presented in FHWA's Hydraulic Engineering Circular (HEC) No. 15. This method requires that the calculated maximum shear stress of a channel is not to exceed the permissible shear stress of the channel liner. To use this method, permissible shear stress values are stated next to each device listed in the channel matrix.

VII. Plans and Specifications

- A. Plans and specifications for installing erosion mat shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. The plans and specifications shall address the following
- Location of erosion mat Installation sequence Material specification conforming to
- B. All plans, standard detail drawings, or specifications shall include schedule for installation, inspection, and maintenance. The responsible party shall be identified.

VIII. Operation and Maintenance

- A. Erosion mats shall at a 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
- B. If there are signs of rilling under the mat, install more staples or more frequent anchoring trenches. If rilling becomes severe enough to prevent establishment of vegetation, remove the section of mat where the damage has occurred. Fill the eroded area with topsoil, compact, reseed and replace the section of mat, trenching and overlapping ends per manufacturer's recommendations. Additional staking is recommended near where rilling was filled.
- C. If the reinforcing plastic netting has separated from the mat, remove the plastic and if necessary replace the mat.

D. Maintenance shall be completed as soon as possible with consideration to site

IX. References

WisDOT "Erosion Control Product Acceptability List" is available online at http://www.dot.wisconsin.gov/business/engrserv/ pal.htm.

X. Definitions

Channel Erosion: The deepening and widening of a channel due to soil loss caused by flowing water. As rills become larger and flows begin to concentrate, soil detachment occurs primarily as a result of shear.

Erosion Control Revegative Mats (ECRM) (II): Erosion control revegetative mats are designed to be placed on top of soil.

Turf-Reinforcement Mats (TRM) (II): Turfreinforcement mats are permanent devices constructed from various types of synthetic materials and buried below the surface to help stabilize the soil. TRMs must be used in conjunction with an ECRM or an approved soil stabilizer Type A (as classified in the WisDOT

WDNR, WI

MAINTAIN 50' MINIMUM SEPARATION FROM DISCHARGE

SEWERS.

OF THE PERMIT.

CONTAINMENT AND WETLANDS, WATER BODIES, OR STORM

THE OWNER OR CONTRACTOR SHALL OBTAIN DEWATERING

PERMIT, AS MAY BE REQUIRED, FROM THE STATE PRIOR TO ANY

DEWATERING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS

DEWATERING OPERATIONS DISCHARGING FROM THE SITE. ALL

SITE PLANNING LANDSCAPE ARCHITECTURE 3030 Harbor Lane North, STE 131 Plymouth Minnesota 55447 763.383.8400

LACROSSE, WI 54602-2107

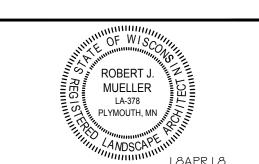
KWIK TRIP, Inc.

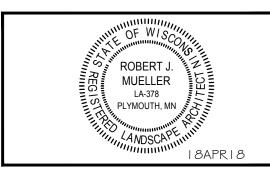
P.O. BOX 2107

1626 OAK STREET

PH. (608) 781-8988

FAX (608) 781-8960





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2402 W BROADWAY MADISON, WISCONSIN

Ш C DATE DESCRIPTION 8JUNE 18 SUBMITTAL 17JULY18 SUBMITTAL 25JULY18 ADD CANOPY

18APR201

SWP4

PLAN VIEW 50' MINIMUM VEGETATIVE BUFFER WATER FLOW OR FILTRATION MEDIA AVOID CONCENTRATED FLOWS OUTWARD DEWATERING BAG WATER FLOW - BAG PLACED ON AGGREGATE BED ESTABLISHED VEGETATION-WATER FLOW DISCHARGE THROUGH NATURAL VEGETATIVE BUFFER OR FILTRATION MEDIA FOR FILTERED OUTFLOW CLEAN WATER OUTFLOW -

- AGGREGATE/BIOROLL DIKE, STAKE BIO-ROLL, BURY BASE ROLL 1/3

AGGREGATE BED - UNDISTURBED SOIL SECTION

DEWATERING BAG INSTALLATION. FOR DISCHARGING ERODED. SUSPENDED PARTICLES IN WATER

NOTE: SEDIMENT LOGS SHALL BE "CURLEX" BY AMERICAN EXCELSIOR COMPANY CURLEX SEDIMENT LOGS® www.americanexcelsior.com/erosioncontrol/ WOOD STAKE OR APPROVED EQUAL — CURLEX[®]EROSION CONTROL BLANKET (ECB) WOOD STAKE, SEE _ DETAIL 3/18 \$ 4/18

STAKE DETAILS (ON TOP OF CURLEX®ECB) ON BARE SOIL) CURLEX SEDIMENT LOGS® WOOD STAKE, SEE DETAIL 5/18 - WOOD STAKE וב וב וב CURLEX SEDIMENT LOGS® WOOD STAKE TO ONL PENETRATE NETTING, NOT CURLEX[®]MATERIA ✓ WOOD STAKE 7 Y Y Y Y **K K K K K K** K K K K K K

> STAKE DETAILS (ON BARE SOIL) SLOPE DETAIL

BIO ROLL INSTALLATION ("LOG WEEPERS")

EROSION CONTROL

 ECRM shall be installed after all A. Class I: A short-term duration (minimum of 6 months), light duty, organic ECRM with plastic or biodegradable netting.

- Type A Only suitable for slope applications, not channel applications.
- 2. Type B Double netted product for use in channels where the calculated (design) shear stress is 1.5 lbs/ft² or
- B. Class II: A long-term duration (three years or greater), organic ECRM.
- Type A Jute fiber only for use in channels to reinforce sod.
- Type B For use in channels where the calculated (design) shear stress is 2.0 lbs/ft² or less. Made with plastic or biodegradable mat.
- Type C A woven mst of 100% organic material for use in channels where the calculated (design) shear

stress is 2.0 lbs/ft² or less. Applicable Conservation Practice Standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact your local WDNR office or the Standards Oversight Council office in Medison.

Words in the standard that are shown in italics are described in X. Definitions. The words are italicized the first time they are used in the text.

PENETRATE NETTING, NOT CURLEX® MATERIA

STAKE DETAIL (FRONT VIEW)

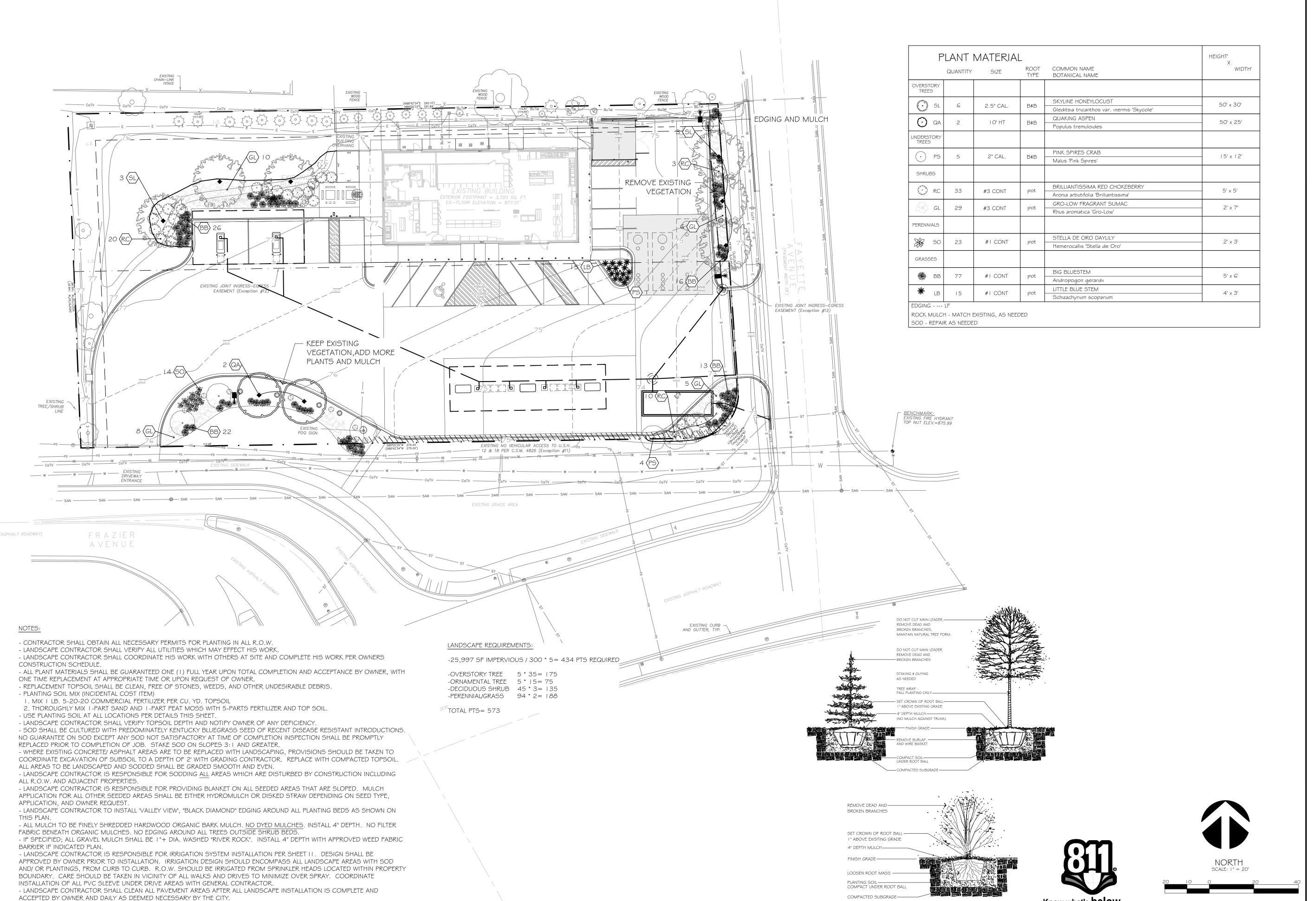
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5

MAINTAIN FILTRATION & REMOVE SEDIMENT OR RECONSTRUCT CONTAINMENT AS NECESSARY WHEN FILTRATION HAS BEEN COMPROMISED.

STAKED BIO-ROLL CONTAINMENT WITH AGGREGATE FILTER DIKE - PUMP WATER INLET

NOT TO SCALE



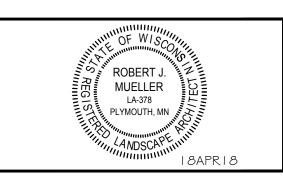
- GENERAL CONTRACTOR TO SWEEP PAVEMENT AREAS PRIOR TO TURN OVER TO OWNER.

KWIK TRIP

KWIK Star

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

SITE PLANNING LANDSCAPE ARCHITECTURE 3030 Harbor Lane North, STE 131 Plymouth Minnesota 55447 763.383.8440



ONVENIENCE STORE 965

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- &JUNE 18 SUBMITTAL
- 17JULY 18 SUBMITTAL
- 25JULY 18 ADD CANOPY

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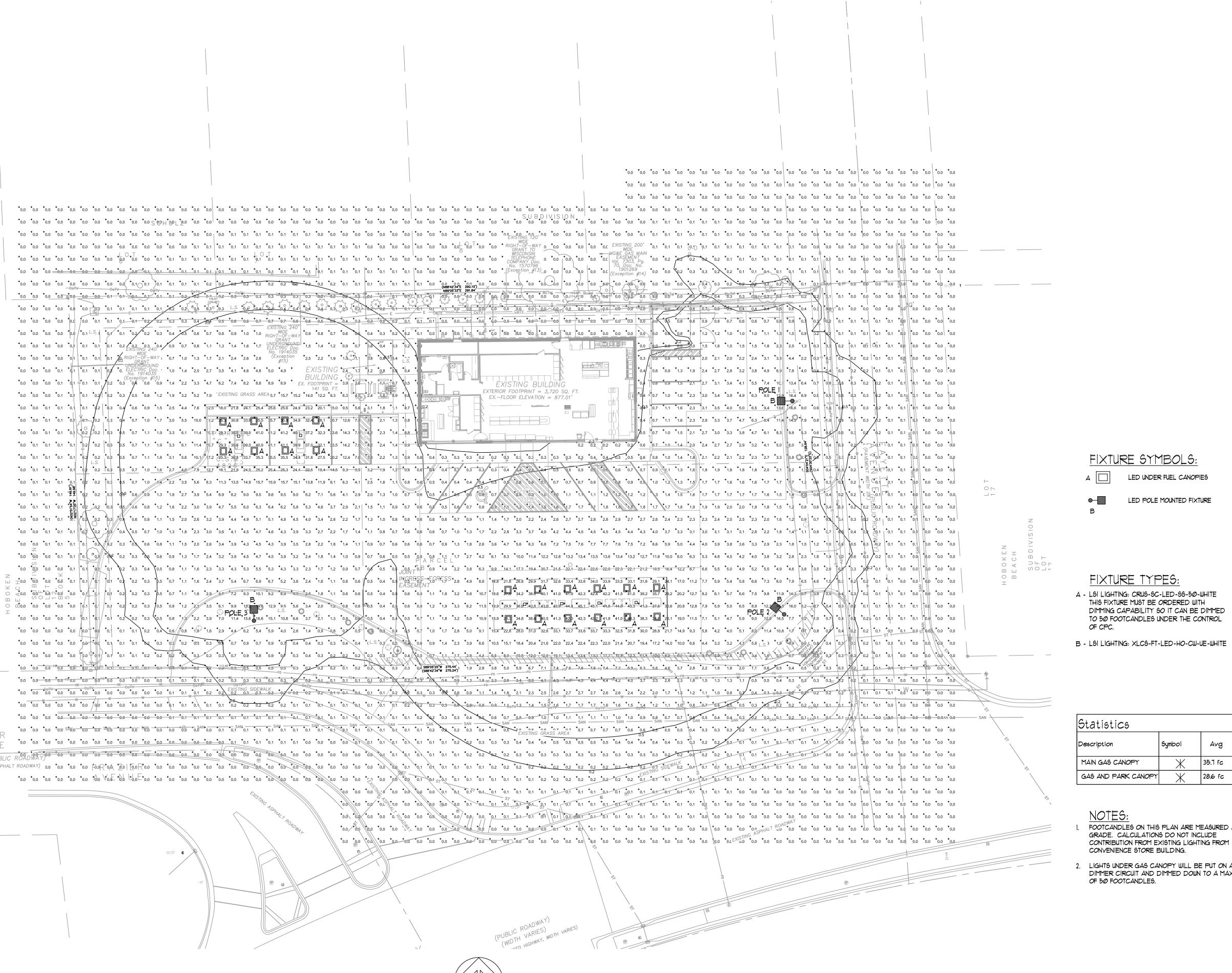
DATE 18APR2018

SHEET

Call before you dig.

PLOTTING NOTE: PLANS PLOTTED TO 1 1x17

SHEET SIZE ARE 1/2 SCALE- 1 "=40".



SCALE: 1" = 20'-0"



LED UNDER FUEL CANOPIES

LED POLE MOUNTED FIXTURE

FIXTURE TYPES:

- A LSI LIGHTING: CRUS-SC-LED-SS-50-WHITE THIS FIXTURE MUST BE ORDERED WITH DIMMING CAPABILITY SO IT CAN BE DIMMED TO 50 FOOTCANDLES UNDER THE CONTROL
- B LSI LIGHTING: XLCS-FT-LED-HO-CW-UE-WHITE

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
MAIN GAS CANOPY	Ж	35.7 fc	45.1 fc	21.7 fc	2.1:1	1.6:1
GAS AND PARK CANOPY	Ж	28.6 fc	41.2 fc	12.5 fc	3.3:1	2.3:1

FOOTCANDLES ON THIS PLAN ARE MEASURED AT GRADE. CALCULATIONS DO NOT INCLUDE

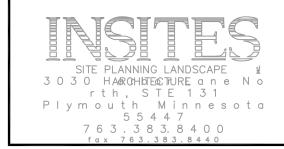
- LIGHTS UNDER GAS CANOPY WILL BE PUT ON A DIMMER CIRCUIT AND DIMMED DOWN TO A MAXIMUM
- OF 50 FOOTCANDLES.

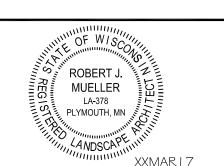






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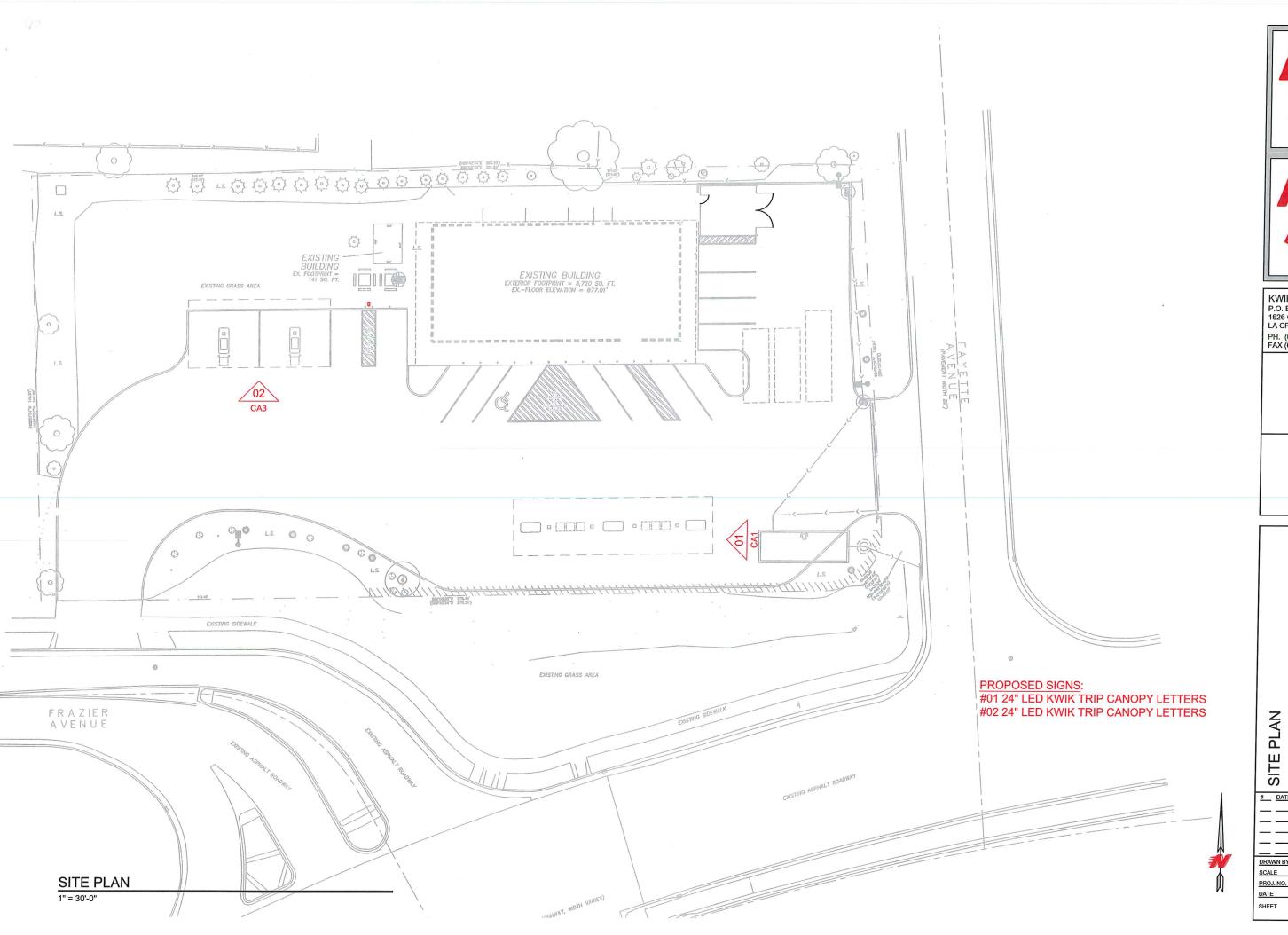


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KWIK TRIP, Inc. P.O. BOX 2107 1626 OAK STREET LA CROSSE, WI 54602-2107 PH. (608) 781-8988 FAX (608) 781-8960

SITE PLAN
CONVENIENCE STORE #965
2402 W BROADWAY

MULTIPLE

2018-08-09

SP1



EXISTING STORE ELEVATION

SCALE: 1/8" = 1'-0"



EXISTING STORE ELEVATION
SCALE: 1/8" = 1'-0"

Kwik Trip

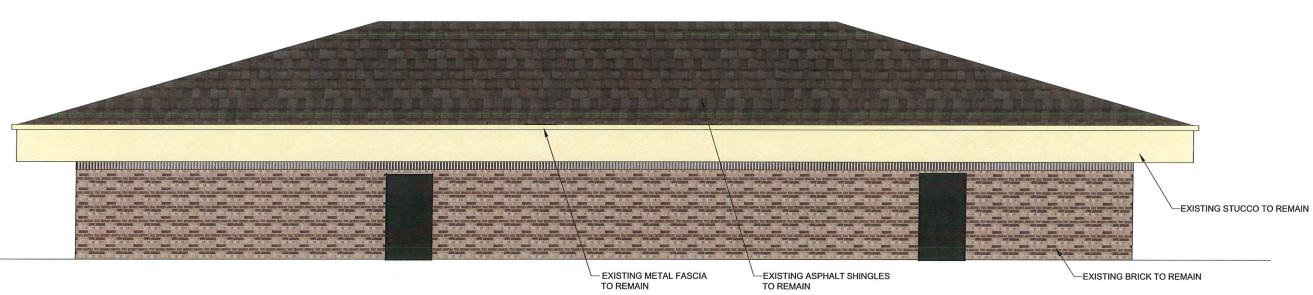


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CONVENIENCE STORE SIGNAGE

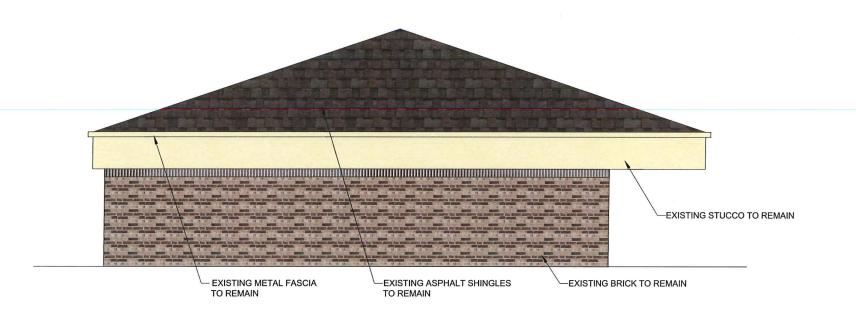
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EXISTING STORE ELEVATION SCALE: 1/8" = 1'-0"



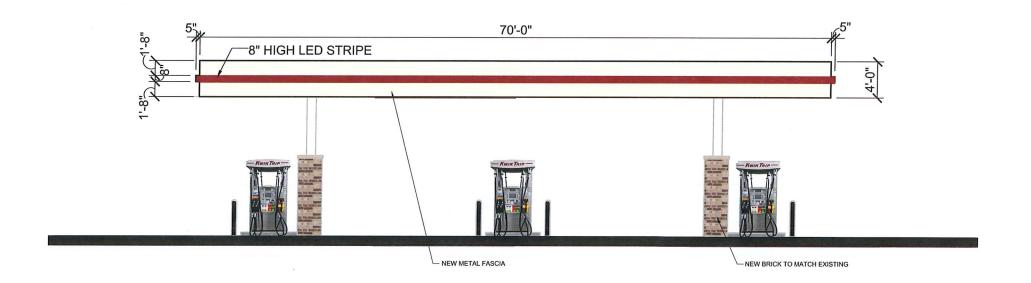
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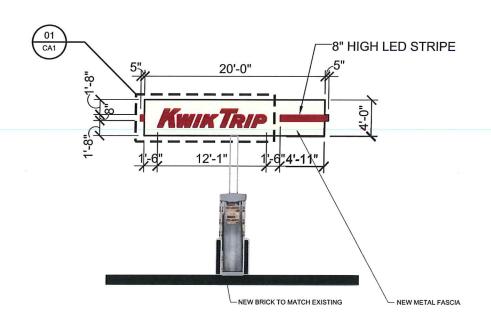
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LOGO DETAIL - SIGN #01

SCALE: 1/2" = 1'-0"





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

CANOPY SIGNAGE
CONVENIENCE STORE #965

CANOPY SIGN.

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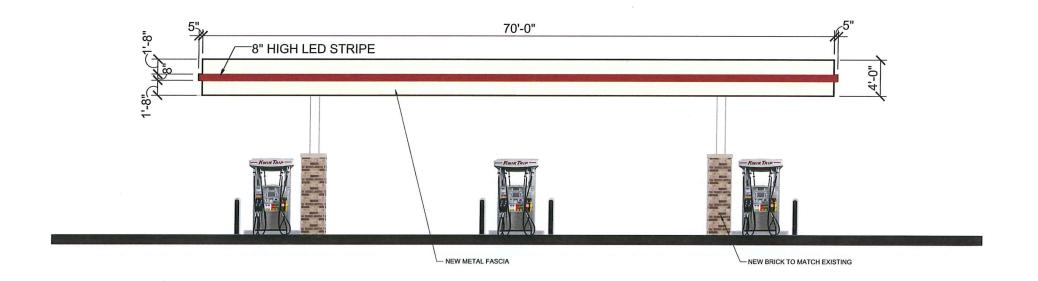
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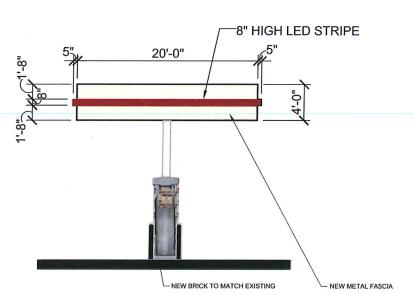
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CANOPY ELEVATION SCALE: 3/32" = 1'-0"



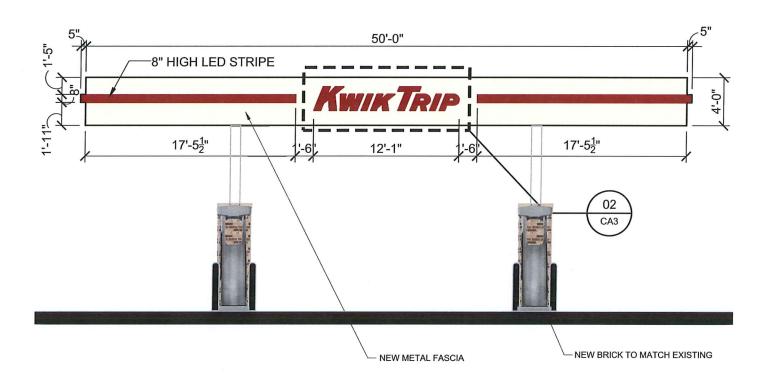


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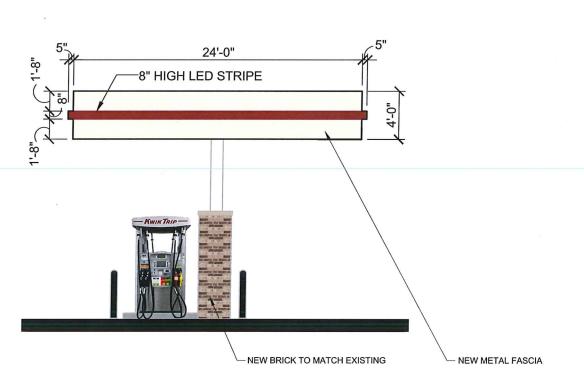
CONVENIENCE STORE #965 CANOPY SIGNAGE

2402 W BROADWAY MADISON, WI

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CANOPY ELEVATION

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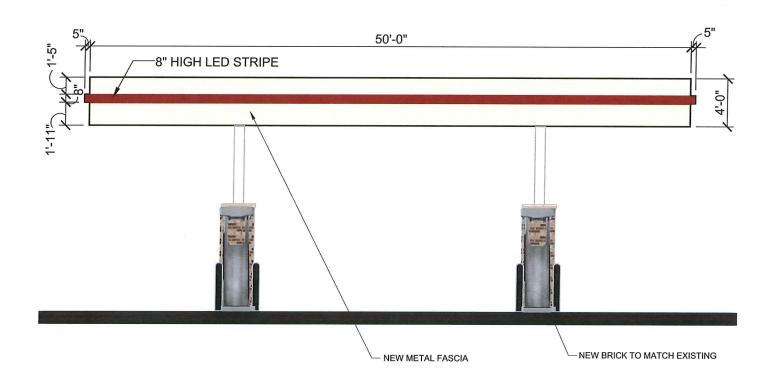


KWIK TRIP, Inc. P.O. BOX 2107 1626 OAK STREET LA CROSSE, WI 54602-2107 PH. (608) 781-8988 FAX (608) 781-8960

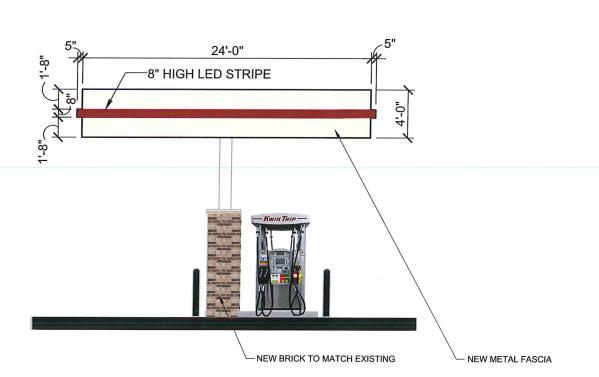
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PROJ. NO.		0001
DATE		2018-08-09

CA3



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CANOPY ELEVATION

SCALE: 1/8" = 1'-0"





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

CONVENIENCE STORE #965 CANOPY SIGNAGE 2402 W BROADWAY MADISON, WI

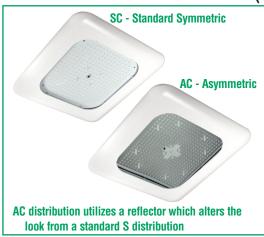
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SHEET

2018-08-09

CA4

LED CANOPY LIGHT - LEGACYTM (CRUS)



DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

Consult Factory

Class 1, Division 2 – Available on LW and SS

T5 Temperature Classification – The surface temperature of this product will not rise above 100°C., within a 40°C ambient.

Project Name

Catalog #

Gas Groups A,B,C, and D - Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

US & Int'l. patents pending.

HOUSING - Low profile, durable die-cast, aluminum construction, providing a reliable weather-tight seal.

LEDS - Features an array of select, mid-power, high brightness, high efficiency LED chips; 5000K color temperature, 70 CRI (nominal).

DRIVE CURRENT - Choice of Very Low Wattage (VLW), Low Wattage (LW), Super Saver (SS), High Output (HO) or Very High Output (VHO).

OPTICS / DISTRIBUTION - Choice of Symmetrical or Asymmetrical, which directs light through a clear tempered glass lens, to provide a uniform distribution of light to vertical and horizontal surfaces.

OPTICAL UNIT - Features an ultra-slim 7/8" profile die-cast housing, with a flat glass lens. Unit is water-resistant, sealed to an IP67 rating. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.

PRESSURE STABILIZING VENT - Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

HAZARDOUS LOCATION - Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 only when properly installed per LSI installation instructions (consult factory).

DRIVER - State-of-the-art driver technology superior energy efficiency and optimum light output. Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.

DRIVER HOUSING - Die-cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry, provide easy "knock-out" connection of primary wiring and contributes to attaining the lowest operating temperatures available. Seals to optical housing via one-piece molded silicone gasket.

OPERATING TEMPERATURE - -40°C to 50°C (-40°F to +122°F)

ELECTRICAL - Universal voltage power supply, 120-277 VAC, 50/60 HZ input. Drivers feature two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Scenario 1, Location Category C.

FINISH - Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.

INSTALLATION - One person installation. No additional sealant required. Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SC/ECTA without having to relocate the conduit. Retro panels are available for existing Encores (see back page) as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

SHIPPING WEIGHT - 27 pounds (single pack), 48 pounds (double pack).

EXPECTED LIFE - Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

WARRANTY - Limited 5-year warranty.

LISTING - UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric data.

> This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.















__ Fixture Type __

LED CANOPY LIGHT - LEGACY™ (CRUS)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: CRUS SC LED HO 50 UE WHT

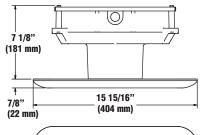
Prefix	Distribution ¹	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
CRUS	SC - Standard Symmetric AC - Asymmetric	LED	VLW - Very Low Watt LW - Low Watt SS - Super Saver HO - High Output VHO - Very High Output	(50 - 5000K)	UE - Universal Voltage (120-277V) 347 - 480V	WHT - White BRZ - Bronze BLK - Black	HL - Hazardous location available on LW and SS

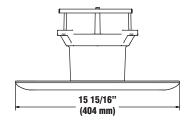
FOOTNOTES:

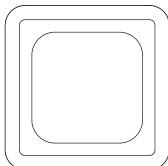
1- AC distribution utilizes a reflector which alters the look from a standard S distribution.

ACCESSORY ORDERING INFORMATION (Access	sories are field installed)		
Description	Order Number	Description	Order Number
Retrofit Panels - EC / ECTA / SCF to CRU, for 16" Deck Panel	525946	Kit - Hole Plugs and Silicone (enough for 25 retrofits) ¹	1320540
Retrofit Panels - ECTA / SCF to CRU, for 12" Deck Panel	530281	1- Consists of (25) 7/8" hole plugs and (1) 10.3 oz tube of RTV	
Retrofit 2x2 Cover Panel Blank (no holes)	357282		
Retrofit RIC Cover Panel Blank (no holes)	354702		

DIMENSIONS







		Lume	ens	Watts	LP'	W
		SC	AC	SC/AC	SC	AC
a)	VLW - Very Low Watt	9055	7632	61	148	125
White —	LW - Low Watt	10525	8884	74	142	120
C00 	SS - Super Saver	13674	11595	98	140	118
	HO - High Output	18633	15145	132	141	115
	VHO - Very High Output	22418	17262	159	141	109

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Catalog #_



City of Madison Fire Department

30 West Mifflin Street, 8th & 9th Floors, Madison, WI 53703-2579 Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: fire@cityofmadison.com

Project Address: 2402 Wes	st Broadway
Contact Name & Phone #:	Bjorn Berg (608) 791-4343

FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

 Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system? If non-sprinklered, fire lanes extend to within 150-feet of all portions of the exterior wall? If sprinklered, fire lanes are within 250-feet of all portions of the exterior wall? 	Yes Yes Yes	No No No	 N/A N/A N/A
 2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs? a) Is the fire lane a minimum unobstructed width of at least 20-feet? b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet? c) Is the minimum inside turning radius of the fire lane at least 28-feet? d) Is the grade of the fire lane not more than a slope of 8%? e) Is the fire lane posted as fire lane? (Provide detail of signage.) f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.) g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.) 	X Yes	No No No No No No No No	 N/A N/A N/A N/A N/A N/A N/A N/A N/A
3. Is the fire lane obstructed by security gates or barricades? If yes:a) Is the gate a minimum of 20-feet clear opening?b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	Yes Yes Yes	No No No	☐ N/A ☐ N/A ☐ N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet? If yes, does the area for turning around fire apparatus comply with IFC D103?	Yes Yes	X No	□ N/A □ N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6 If yes, see IFC 3206.6 for further requirements.	Yes	X No	□ N/A
6. Is any part of the building greater than 30-feet above the grade plane?	Yes	X No	□ N/A
If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species)	☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes	 No No No No	 N/A N/A N/A N/A
If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species) e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes	NoNoNoNoNoNo	 N/A N/A N/A N/A N/A
If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species) e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet? f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes	 No No No No	 N/A N/A N/A N/A
If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species) e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet? f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	☐ Yes	NoNoNoNoNoNoNoNo	 N/A N/A N/A N/A N/A N/A N/A

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on MGO 34.503 and IFC 2012 Edition Chapter 5 and Appendix D; please see the codes for further information.



CITY OF MADISON LANDSCAPE WORKSHEET

Section 28.142 Madison General Ordinance

Project Location / Address 2402 West Broadway
Name of ProjectKwik Trip Store 965
Owner / Contact Kwik Trip Inc. / Bjorn Berg
Contact Phone (608) 791-4343 Contact Email bberg@kwiktrip.com
** Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size MUST be prepared by a registered landscape architect. **
Applicability
The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless all of the following conditions apply, in which case only the affected areas need to be brought up to compliance:
(a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10)
year period.
(b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
(c) No demolition of a principal building is involved.
(d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.
Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot. There are three methods for calculating landscape points depending on the size of the lot and Zoning District. (a) For all lots except those described in (b) and (c) below, five (5) landscape points shall be provided for each
three hundred (300) square feet of developed area. Total square footage of developed area _37,549 sf
Total square footage of developed area <u>37,349 Si</u>
Total landscape points required625
(b) For lots larger than five (5) acres, points shall be provided at five (5) points per three hundred (300) square feet for the first five (5) developed acres, and one (1) point per one hundred (100) square feet for all additional acres.
Total square footage of developed area
Five (5) acres = $\underline{217,800}$ square feet
First five (5) developed acres = $\underline{3,630 \text{ points}}$
Remainder of developed area
Total landscape points required
(c) For the Industrial – Limited (IL) and Industrial – General (IG) districts, one (1) point shall be provided per one hundred (100) square feet of developed area.
Total square footage of developed area
Total landscape points required

Tabulation of Points and Credits

Use the table to indicate the quantity and points for all existing and proposed landscape elements.

Plant Type/Floment	Minimum Size at	Points		Existing caping	New/ Proposed Landscaping	
Plant Type/ Element			Quantity	Points Achieved	Quantity	Points Achieved
Overstory deciduous tree	2½ inch caliper measured diameter at breast height (dbh)	35	4	140	8	280
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35	17	595		
Ornamental tree	1 1/2 inch caliper	15	1	15	4	60
Upright evergreen shrub (i.e. arborvitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12"-24"	3	5	15	62	186
Shrub, evergreen	#3 gallon container size, Min. 12"-24"	4				
Ornamental grasses/ perennials	#1 gallon container size, Min. 8"-18"	2			115	230
Ornamental/ decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 ½ inch caliper dbh. *Trees must be within developed area and cannot comprise more than 30% of total required points.	14 per caliper inch dbh. Maximum points per tree: 200				
Landscape furniture for public seating and/or transit connections	* Furniture must be within developed area, publically accessible, and cannot comprise more than 5% of total required points.	5 points per "seat"				
Sub Totals				765		756

Tota	l Number	of Points Provide	d 1.521
1 VI		vi i viilla i ivviut	1,021

^{*} As determined by ANSI, ANLA- American standards for nursery stock. For each size, minimum plant sizes shall conform to the specifications as stated in the current American Standard for Nursery Stock.

Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, as foundation plantings, or as general site landscaping. The total number of landscape points provided shall be distributed on the property as follows.

Total Developed Area

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

Development Frontage Landscaping

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant materials.

Interior Parking Lot Landscaping

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. **All parking lots with twenty (20) or more parking spaces** shall be landscaped in accordance with the interior parking lot standards.

Foundation Plantings

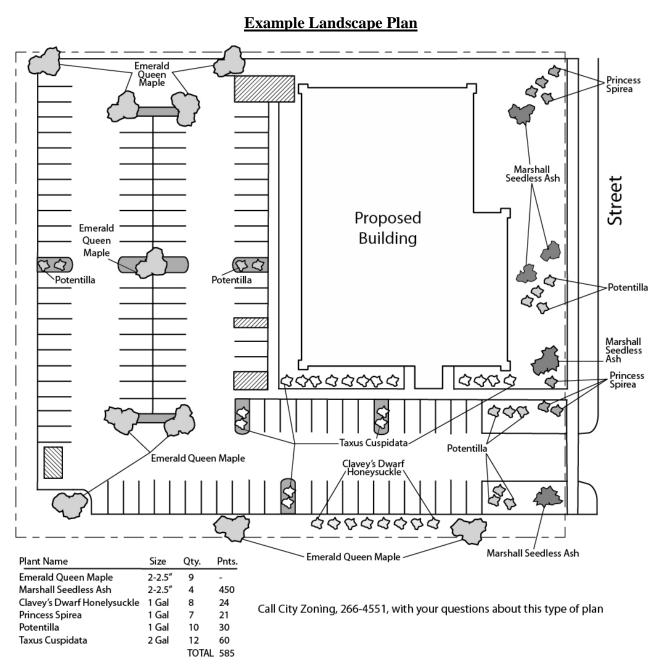
Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses.

Screening Along District Boundaries

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts.

Screening of Other Site Elements

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site: refuse disposal areas, outdoor storage areas, loading areas, and mechanical equipment.



LANDSCAPE PLAN AND LANDSCAPE WORKSHEET INSTRUCTIONS

Refer to Zoning Code Section 28.142 LANDSCAPING AND SCREENING REQUIREMENTS for the complete requirements for preparing and submitting a Landscape Plan and Landscape Worksheet.

Applicability.

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless all of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

- (a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- (b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- (c) No demolition of a principal building is involved.
- (d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

Landscape Plan and Design Standards.

Landscape plans shall be submitted as a component of a site plan, where required, or as a component of applications for other actions, including zoning permits, where applicable. Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size must be prepared by a registered landscape architect.

- (a) Elements of the landscape plan shall include the following:
 - 1. Plant list including common and Latin names, size and root condition (i.e. container or ball & burlap).
 - 2. Site amenities, including bike racks, benches, trash receptacles, etc.
 - 3. Storage areas including trash and loading.
 - 4. Lighting (landscape, pedestrian or parking area).
 - 5. Irrigation.
 - 6. Hard surface materials.
 - 7. Labeling of mulching, edging and curbing.
 - 8. Areas of seeding or sodding.
 - 9. Areas to remain undisturbed and limits of land disturbance.
 - 10. Plants shall be depicted at their size at sixty percent (60%) of growth.
 - 11. Existing trees eight (8) inches or more in diameter.
 - 12. Site grading plan, including stormwater management, if applicable.
- (b) Plant Selection. Plant materials provided in conformance with the provisions of this section shall be nursery quality and tolerant of individual site microclimates.
- (c) Mulch shall consist of shredded bark, chipped wood or other organic material installed at a minimum depth of two (2) inches.

Landscape Calculations and Distribution.

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area, for the purpose of this requirement, is defined as that area within a single contiguous boundary which is made up of structures, parking driveways and docking/loading facilities, but **excluding** the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

- (a) Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, and as foundation plantings, or as general site landscaping.
- (b) Planting beds or planted areas must have at least seventy-five percent (75%) vegetative cover.
- (c) Canopy tree diversity requirements for new trees:
 - 1. If the development site has fewer than 5 canopy trees, no tree diversity is required.
 - 2. If the development site has between 5 and 50 canopy trees, no single species may comprise more than 33% of trees.
 - 3. If the development site has more than 50 canopy trees, no single species may comprise more than 20% of trees.

Development Frontage Landscaping.

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant material meeting the following minimum requirements:

10/2013 4

- (a) One (1) overstory deciduous tree and five (5) shrubs shall be planted for each thirty (30) lineal feet of lot frontage. Two (2) ornamental trees or two (2) evergreen trees may be used in place of one (1) overstory deciduous tree.
- (b) In cases where building facades directly abut the sidewalk, required frontage landscaping shall be deducted from the required point total.
- (c) In cases where development frontage landscaping cannot be provided due to site constraints, the zoning administrator may waive the requirement or substitute alternative screening methods for the required landscaping.
- (d) Fencing shall be a minimum of three (3) feet in height, and shall be constructed of metal, masonry, stone or equivalent material. Chain link or temporary fencing is prohibited.

Interior Parking Lot Landscaping.

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. All parking lots with twenty (20) or more parking spaces shall be landscaped in accordance with the following interior parking lot standards.

- (a) For new development on sites previously undeveloped or where all improvements have been removed, a minimum of eight percent (8%) of the asphalt or concrete area of the parking lot shall be devoted to interior planting islands, peninsulas, or landscaped strips. For changes to a developed site, a minimum of five percent (5%) of the asphalt or concrete area shall be interior planting islands, peninsulas, or landscaped strips. A planting island shall be located at least every twelve (12) contiguous stalls with no break or alternatively, landscaped strips at least seven (7) feet wide between parking bays.
- (b) The primary plant materials shall be shade trees with at least one (1) deciduous canopy tree for every one hundred sixty (160) square feet of required landscaped area. Two (2) ornamental deciduous trees may be substituted for one (1) canopy tree, but ornamental trees shall constitute no more than twenty-five percent (25%) of the required trees. No light poles shall be located within the area of sixty percent (60%) of mature growth from the center of any tree.
- (c) Islands may be curbed or may be designed as uncurbed bio-retention areas as part of an approved low impact stormwater management design approved by the Director of Public Works. The ability to maintain these areas over time must be demonstrated. (See Chapter 37, Madison General Ordinances, Erosion and Stormwater Runoff Control.)

Foundation Plantings.

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses. The Zoning Administrator may modify this requirement for development existing prior to the effective date of this ordinance, as long as improvements achieve an equivalent or greater level of landscaping for the site.

Screening Along District Boundaries.

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts. Screening shall consist of a solid wall, solid fence, or hedge with year-round foliage, between six (6) and eight (8) feet in height, except that within the front yard setback area, screening shall not exceed four (4) feet in height. Height of screening shall be measured from natural or approved grade. Berms and retaining walls shall not be used to increase grade relative to screening height.

Screening of Other Site Elements.

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site, as follows:

- (a) <u>Refuse Disposal Areas.</u> All developments, except single family and two family developments, shall provide a refuse disposal area. Such area shall be screened on four (4) sides (including a gate for access) by a solid, commercial-grade wood fence, wall, or equivalent material with a minimum height of six (6) feet and not greater than seven (7) feet.
- (b) <u>Outdoor Storage Areas.</u> Outdoor storage areas shall be screened from abutting residential uses with a by a building wall or solid, commercial-grade wood fence, wall, year-round hedge, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.
- (c) <u>Loading Areas.</u> Loading areas shall be screened from abutting residential uses and from street view to the extent feasible by a building wall or solid, commercial-grade wood fence, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.
- (d) <u>Mechanical Equipment.</u> All rooftop and ground level mechanical equipment and utilities shall be fully screened from view from any street or residential district, as viewed from six (6) feet above ground level. Screening may consist of a building wall or fence and/or landscaping as approved by the Zoning Administrator.

Maintenance.

The owner of the premises is responsible for the watering, maintenance, repair and replacement of all landscaping, fences, and other landscape architectural features on the site. All planting beds shall be kept weed free. Plant material that has died shall be replaced no later than the upcoming June 1.

LED AREA LIGHTS - LSI SLICE SMALL (XLCS)



DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

LIGHT OUTPUT - XLCS									
		Туре 3	L Type FT	umens (N Type 5	lominal) Type5E	TypeFTE	Watts (Nominal)		
-#	SS	10100	11400	11400	8200	7800	97		
Cool White	Н0	14000	15500	15700	11600	10600	140		
it a	SS	9700	10400	10800	7900	7500	97		
Neutr Whit	НО	13400	14700	15200	11000	10500	140		

LED Chips are frequently updated therefore values may increase.

US & Int'l, patents pending

SMARTTEC™ - LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature.

ENERGY SAVING CONTROL OPTION - DIM - 0-10 volt dimming enabled with controls by others.

EXPECTED LIFE - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

LEDS - Select high-brightness LEDs in Cool White (5000K), or Neutral White (4000K) color temperature, 70 CRI.

DISTRIBUTION/PERFORMANCE - Types 3, FT, 5 and enhanced 5E and FTE. Exceptional uniformity creates bright environment at lower light levels. Internal Louver (IL) option available for improved backlight control without sacrificing street side performance for FT distribution.

HOUSING - One-piece, die-formed aluminum housing contains factory prewired driver. Wiring access door (with safety lanyard) located underneath.

OPTICAL UNIT - Clear tempered flat glass lens permanently sealed to weather-tight aluminum optic frame creates an IP65 rated optical unit (includes pressure-stabilizing breather).

MOUNTING - Tapered rear design allows fixtures to be mounted in 90° and 120° configurations without the need for extension arms. Use with 3" reduced drilling pattern. A round pole plate is required for mounting to round poles. Wall mount available by ordering wall mounting bracket (BKS-XBO-WM-*-CLR). Proprietary pole quick mount accessories available with horizontal mounting or fixed 15° angled mounting (PQMH-KIT-CLR and PQM15-KIT-CLR) for mounting to square poles. See Accessory Ordering Information chart for all brackets.

ELECTRICAL - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277 VAC (50/60Hz input), and 347-480 VAC. Optional buttontype photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified).

DRIVER - Available in SS (Super Saver) and HO (High Output) drive currents. Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F)

FINISH - Fixtures are finished with LSI's DuraGrip[®] polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Available in black, bronze and white. Other standard LSI finishes available. Consult factory.

WARRANTY - LSI LED fixtures carry a limited 5-year warranty.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric

SHIPPING WEIGHT (in carton) - One fixture: 17.5 lbs. (7.9 kg). Packed two per carton: 30 lbs. (13.6 kg).

LISTING - UL listed to U.S. and international safety standards. Suitable for wet locations. For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at www.designlights.org.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.















Fixtures comply with ANSI C136.31-2010 American National Standard for Roadway Lighting Equipment - Luminaire Vibration 1.5G



Catalog #

Project Name → Fixture Type —

LED AREA LIGHTS - LSI SLICE SMALL (XLCS)

LUMINAIRE ORDERING INFORMATION

XLCS S **LED** SS **50** UE **BLK PCR** TYPICAL ORDER EXAMPLE:

Prefix	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
XLCS	3 - Type III 5 - Type V FT - Forward Throw 5E - Type V Enhanced FTE - Foward Throw Enhanced	(LED)	SS - Super Saver (HO -High Output)	<mark>50 - 5000K</mark> 40 - 4000K	UE - Universal Voltage (120-277V) 347-480 Universal Voltage (347-480V)	BLK - Black BRZ - Bronze WHT - White	DIM - 0-10V Dimming (from external signal) Button Type Photocells PC1120 - 120V PC1208-277V - 208-277V PC1347 - 347V IL - Internal Louver (available with FT distribution only) PCR 7P - Photoelectric Control Receptacle 3

LUMINAIRE EPA CHART - PLCS								
Horizontal Mo	Horizontal Mounting Only							
Single	0.4							
■ ■ D180°	0.8							
T_ D90°	0.6							
■	1.4							
TN120°	1.4							
■ Q90°	1.6							

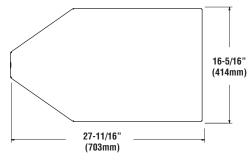
Note: House Side Shield adds to fixture EPA. Consult Factory.

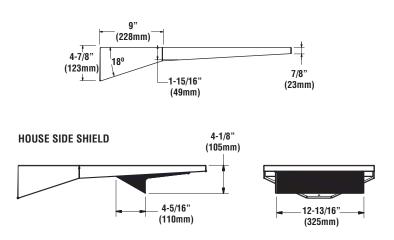
ACCESSORY ORDERING INFORMATION	(Accessories are	field installed)	
Description	Order Number	Description	
BKS-XBO-WM-*-CLR Wall Mount Bracket	382132CLR	DFK208, 240 Double Fusing (208V, 240V)	DFK208, 240 ²
XLCS-3/FT-HSS (Black only)	603162BLK ¹	DFK480 Double Fusing (480V)	DFK480 ²
X3RPP Round Pole Plate for 3" RTP Poles	408273CLR	FK347 Single Fusing (347V)	FK347 ²
X4RPP Round Pole Plate for 4" Poles	379967CLR	PQMH-KIT-CLR Square Pole Quick Mount Horizontal Bracket	582328CLR
X5RPP Round Pole Plate for 5" Poles	379968CLR	PQM15-KIT-CLR Square Pole Quick Mount Bracket w/fixed 15° Ang	le 582329CLR
FK120 Single Fusing (120V)	FK120 ²	ALSC UNV TL5 - AirLink 5 Pin Twist Lock Controller	661409
FK120 Single Fusing (120V)FK	FK277 ²	ALSC UNV TL7 - AirLink 7 Pin Twist Lock Controller	661410

FOOTNOTES

- 1 House Side Shields add to fixture EPA. Consult factory.
 2 Fusing must be located in the hand hole of pole.
 3 Photocell must be ordered separately. 7 pin standard. See Accessories.

DIMENSIONS





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LED AREA LIGHTS - LSI SLICE SMALL (XLCS)

BUG LISTING

VI	.CS	7	Гур	^	2
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Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
	CW	14,020	143	98	B3-U0-G2
Н0	CW-HSS	8815	146	60	B2-U0-G2
	NW	13,421	143	94	B3-U0-G2
SS	CW	10,126	97	105	B3-U0-G2
	NW	9719	97	101	B3-U0-G2

XLCS - Type 5E

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
H0	CW	11,581	146	79	B4-U0-G2
	NW	10,996	146	75	B4-U0-G2
SS	CW	8202	96	85	B3-U0-G2
	NW	7908	96	82	B3-U0-G2

XLCS - Type 5

		71200	.,,,,,		
Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
H0	CW	15,674	138	113	B4-U0-G2
	NW	15,184	146	104	B4-U0-G2
SS	CW	11,449	96	119	B3-U0-G2
	NW	10,762	96	112	B3-U0-G1

XLCS - Type FTE

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating	
	CW	10585	141	75	B2-U0-G2	
HO	CW-HSS	7810	146	53	B1-U0-G2	
	NW	10,499	146	72	B2-U0-G2	
	NW-HSS	7721	146	53	B1-U0-G2	
	CW	7752	96	81	B1-U0-G2	
SS	CW-HSS	5676	96	59	B1-U0-G2	
	NW	7493	96	78	B1-U0-G2	
	NW-HSS	5517	96	57	B1-U0-G2	

XLCS - Type FT

Drive Current	Color Temp.*	Lumens	Watts	LER	BUG Rating
	CW	15,535	139	112	B3-U0-G2
	CW-HSS	12,489	139	90	B1-U0-G2
HO	CW-IL	14,384	138	104	B3-U0-G2
	NW	14,694	146	100	B3-U0-G2
	NW-HSS	10,499	144	73	B1-U0-G2
	NW-IL	12,763	144	89	B2-U0-G2
	CW	11,383	96	118	B2-U0-G2
	CW-HSS	9099	96	95	B1-U0-G2
SS	CW-IL	10,509	96	109	B2-U0-G2
	NW	10,410	96	108	B2-U0-G2
	NW-HSS	7699	99	78	B1-U0-G2
	NW-IL	9328	98	95	B2-U0-G2

* Color Temperature: NW-4000K, CW-5000K