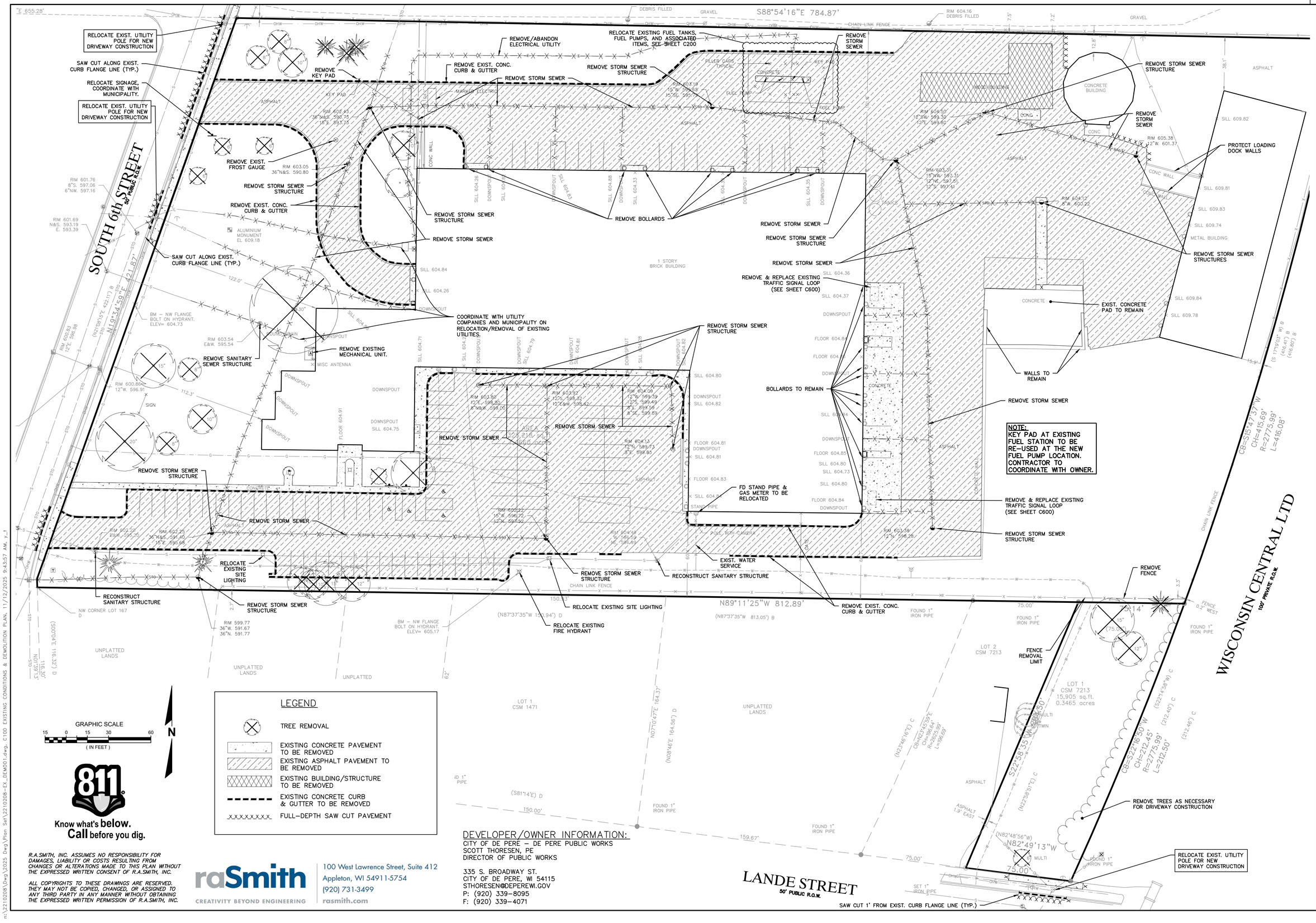
Planning/Zoning Application

Planning & Zoning Department

Submitted On:
Nov 12, 2025, 11:00AM EST

Parcel Number: (Include ALL parcels)	WD-142 WD-144-1-1
Nearest property address to the project site:	**Street Address:** 925 S SIXTH ST **City:** DE PERE **State:** WI **Zip:** 54115
Check each project type that is being applied for:	Site Plan
Current De Pere Zoning Districts:	PI-2
Existing Site Land Uses:	Public & Civic
Proposed Site Land Uses:	Public & Civic
Does the project comply with the Comprehensive Plan?	Yes
Has City Staff been contacted for a pre-consultation meeting?	Yes
Property Owner:	**First Name:** Scott **Last Name:** Thoresen
Is the property owner's address the same as the nearest property address?	Yes
Property Owner's Phone Number:	920-339-8095
Property Owner's Email Address:	sthoresen@deperewi.gov
Is someone processing the project for the property owner as their authorized representative?	Yes
Authorized Representative's Name:	**First Name:** Yeechue **Last Name:** Thao
Authorized Representative's Business Name:	raSmith
Authorized Representative's Address:	**Street Address:** 100 W. Lawrence St. **Authorized Representative's Address::** Ste. 306 **City:** Appleton **State:** WI **Zip:** 54911
Authorized Representative's Phone Number:	262-901-2236

Authorized Representative's Email Address:	yeechue.thao@rasmith.com
Please attach a PDF copy of the site plan.	DePere Municipal Services Center Renovation - CIVIL PLAN.pdf
Please attach a CAD copy of the property that shows the footprint of all hard, impervious surfaces. (Only one page needed, not the entire site plan.)	SITE PLAN CAD FILES.zip
Would you like a basic checklist of information to include in the site plan?	Yes
How do you plan on paying for your application?	City is the petitioner
Total Due:	$350.00
Signature Data	First Name: Yeechue Last Name: Thao Email Address: yeechue.thao@rasmith.com  Signed at: November 11, 2025 4:21pm America/New_York
User's Session Information	IP Address: 67.53.179.14 Referrer URL:



GRAPHIC SCALE
15 0 15 30 60
(IN FEET)

N

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

LEGEND

- TREE REMOVAL
- EXISTING CONCRETE PAVEMENT TO BE REMOVED
- EXISTING ASPHALT PAVEMENT TO BE REMOVED
- EXISTING BUILDING/STRUCTURE TO BE REMOVED
- EXISTING CONCRETE CURB & GUTTER TO BE REMOVED
- FULL-DEPTH SAW CUT PAVEMENT

raSmith
CREATIVITY BEYOND ENGINEERING
100 West Lawrence Street, Suite 412
Appleton, WI 54911-5754
(920) 731-3499
rasmith.com

DEVELOPER/OWNER INFORMATION:
CITY OF DE PERE – DE PERE PUBLIC WORKS
SCOTT THORESEN, PE
DIRECTOR OF PUBLIC WORKS

335 S. BROADWAY ST.
CITY OF DE PERE, WI 54115
STHORESEN@DEPEREWI.GOV
P: (920) 339-8095
F: (920) 339-4071

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

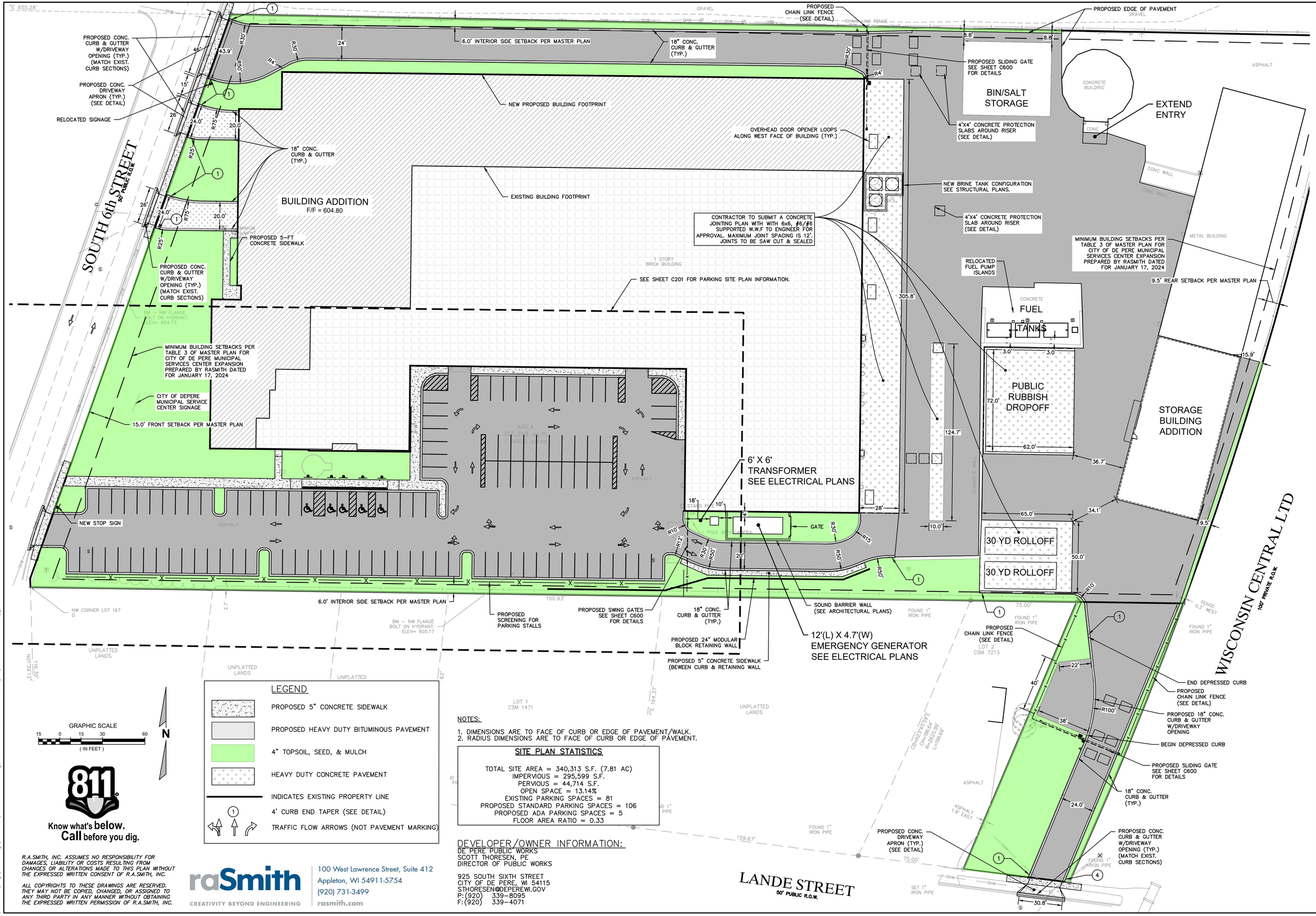
Project Status	Issue Date
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

EXISTING CONDITIONS & DEMOLITION PLAN

C100



LEGEND

- PROPOSED 5" CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT
- 4" TOPSOIL, SEED, & MULCH
- HEAVY DUTY CONCRETE PAVEMENT
- INDICATES EXISTING PROPERTY LINE
- 4' CURB END TAPER (SEE DETAIL)
- TRAFFIC FLOW ARROWS (NOT PAVEMENT MARKING)

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

NOTES:

1. DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT/WALK.
2. RADIUS DIMENSIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT.

SITE PLAN STATISTICS

TOTAL SITE AREA = 340,313 S.F. (7.81 AC)
IMPERVIOUS = 295,599 S.F.
PERVIOUS = 44,714 S.F.
OPEN SPACE = 13.14%
EXISTING PARKING SPACES = 81
PROPOSED STANDARD PARKING SPACES = 106
PROPOSED ADA PARKING SPACES = 5
FLOOR AREA RATIO = 0.33

DEVELOPER/OWNER INFORMATION:
DE PERE PUBLIC WORKS
SCOTT THORESEN, PE
DIRECTOR OF PUBLIC WORKS

925 SOUTH SIXTH STREET
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STHORESEN@DEPEREWI.GOV
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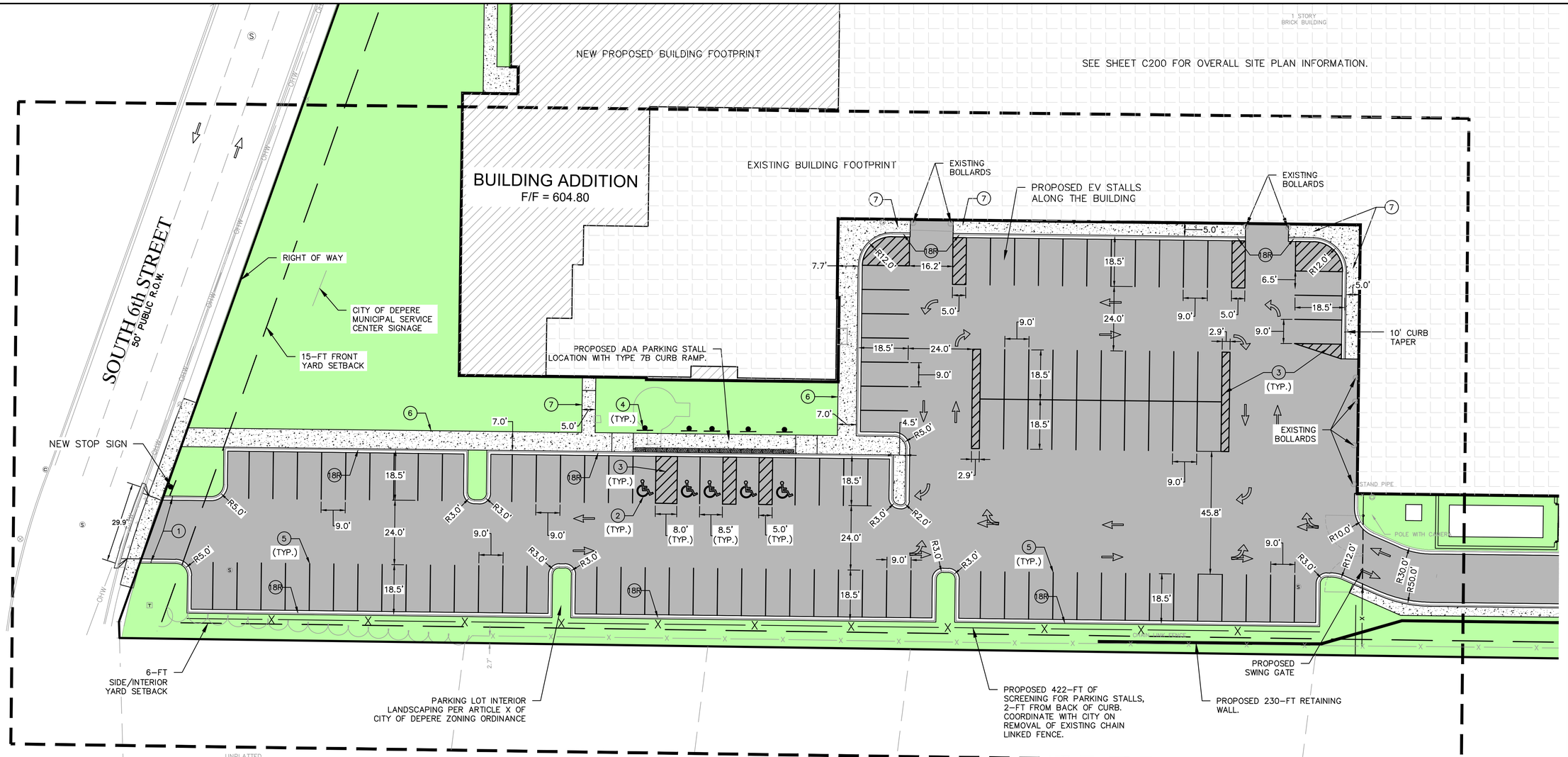
OVERALL SITE PLAN

C200



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- 4" TOPSOIL, SEED, & MULCH
- HEAVY DUTY CONCRETE PAVEMENT
- INDICATES EXISTING PROPERTY LINE
- (1) 4' CURB END TAPER (SEE DETAIL)
- TRAFFIC FLOW ARROWS (NOT PAVEMENT MARKING)
- (2) PAVEMENT MARKING – ADA PARKING SYMBOL (SEE DETAIL ON SHEET C503)
- (3) PAVEMENT MARKING – AISLE, 4-INCH, WHITE (3' O.C. SPACING)
- (4) POST MOUNTED ADA SIGNAGE (SEE DETAIL ON SHEET C503)
- (5) PAVEMENT MARKING, 4-INCH WHITE
- (6) 7-FT CONCRETE SIDEWALK
- (7) 5-FT CONCRETE SIDEWALK
- (18S) PROPOSED 18" STANDARD CURB AND GUTTER
- (18R) PROPOSED 18" REJECT CURB & GUTTER

GRAPHIC SCALE
10 0 10 20 40
(IN FEET)

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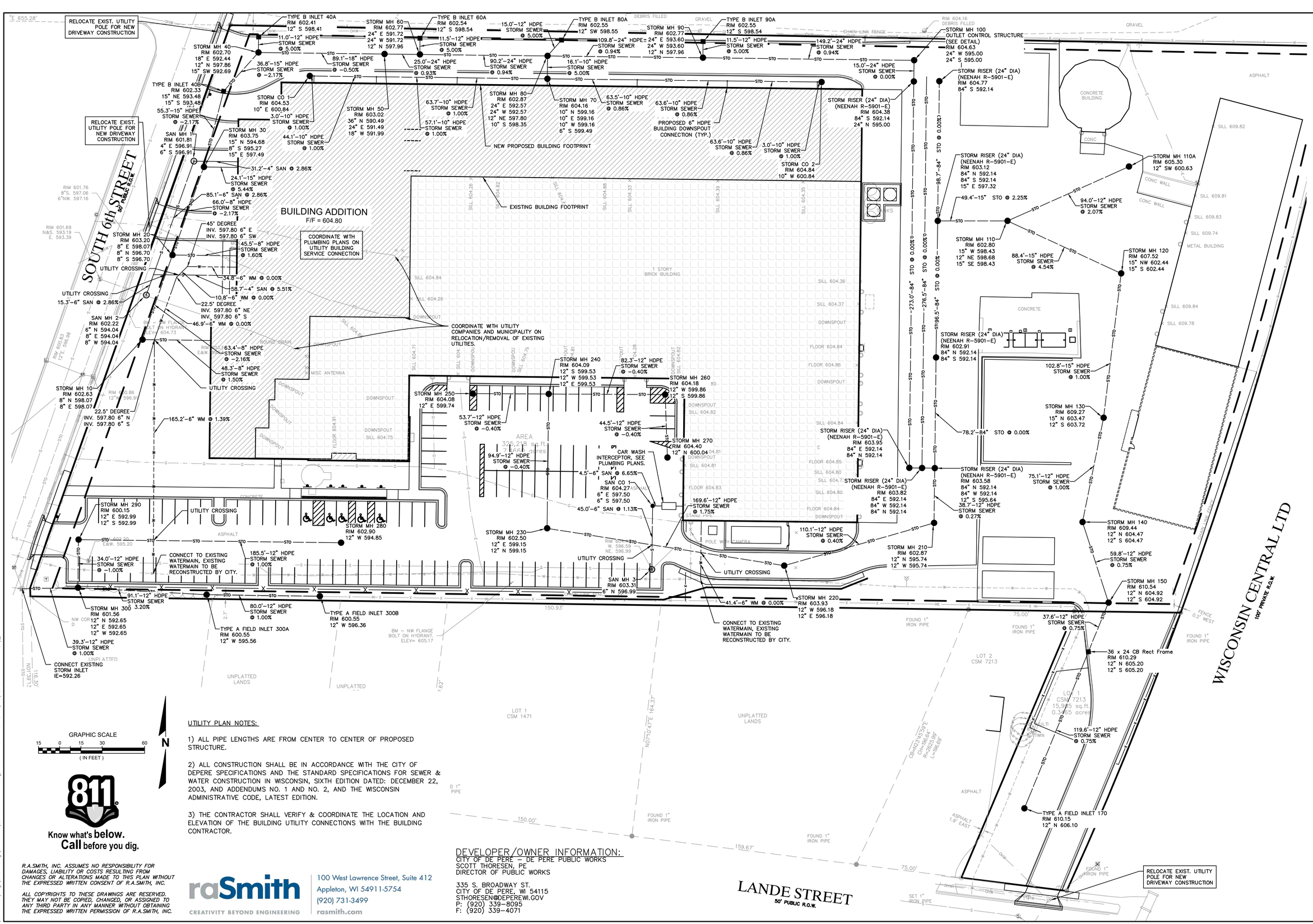
PARKING SITE PLAN

C201



UTILITY PLAN NOTES:

1) ALL PIPE LENGTHS ARE FROM CENTER TO CENTER OF PROPOSED STRUCTURE.

2) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF DEPERE SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION DATED: DECEMBER 22, 2003, AND ADDENDUMS NO. 1 AND NO. 2, AND THE WISCONSIN ADMINISTRATIVE CODE, LATEST EDITION.

3) THE CONTRACTOR SHALL VERIFY & COORDINATE THE LOCATION AND ELEVATION OF THE BUILDING UTILITY CONNECTIONS WITH THE BUILDING CONTRACTOR.

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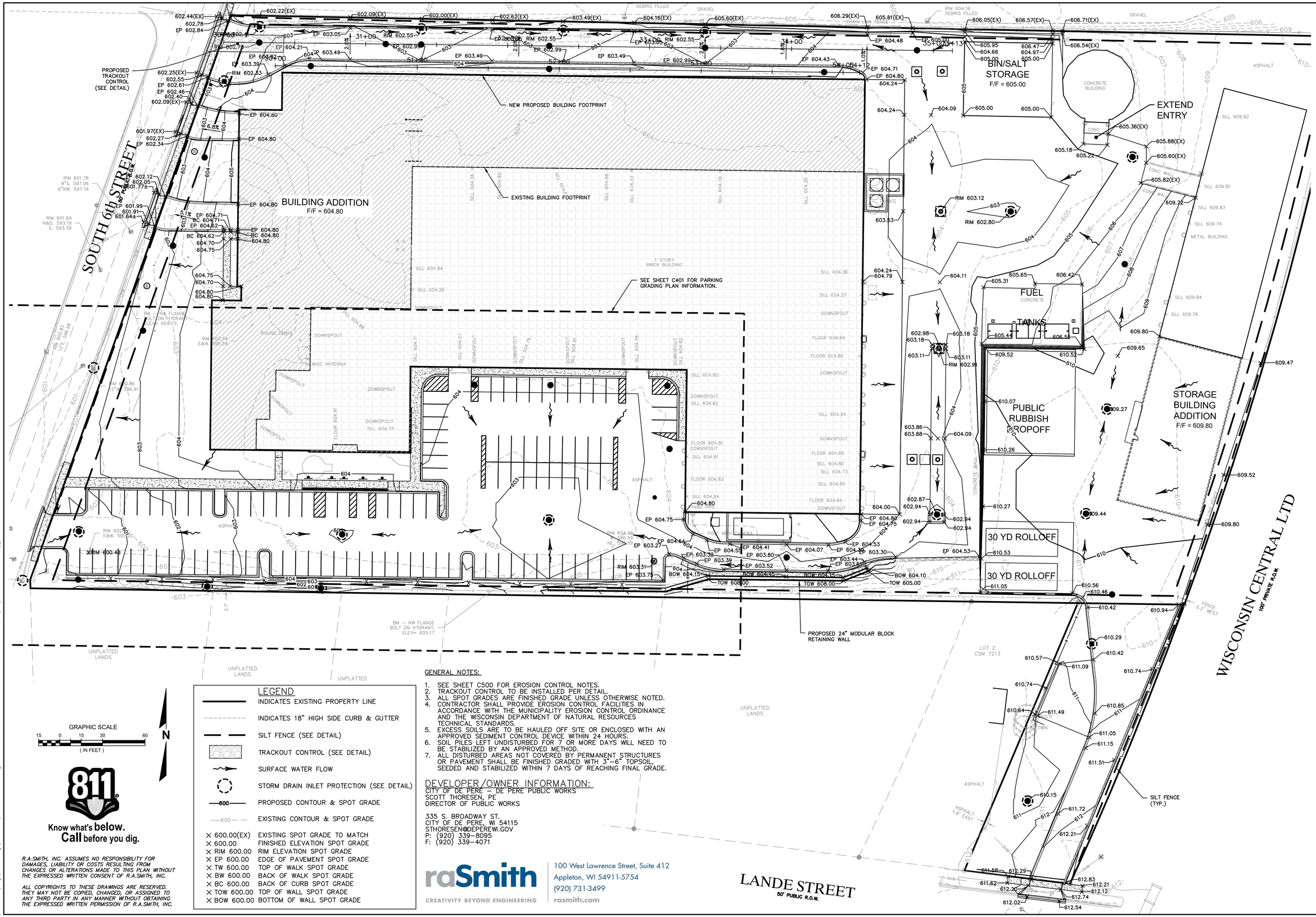
REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

UTILITY PLAN

C300



GRAPHIC SCALE
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LEGEND

	INDICATES EXISTING PROPERTY LINE
	INDICATES 18" HIGH SIDE CURB & GUTTER
	SILT FENCE (SEE DETAIL)
	TRACKOUT CONTROL (SEE DETAIL)
	SURFACE WATER FLOW
	STORM DRAIN INLET PROTECTION (SEE DETAIL)
600	PROPOSED CONTOUR & SPOT GRADE
600	EXISTING CONTOUR & SPOT GRADE
× 600.00(EX)	EXISTING SPOT GRADE TO MATCH
× 600.00	FINISHED ELEVATION SPOT GRADE
× RIM 600.00	RIM ELEVATION SPOT GRADE
× EP 600.00	EDGE OF PAVEMENT SPOT GRADE
× TW 600.00	TOP OF WALK SPOT GRADE
× BW 600.00	BACK OF WALK SPOT GRADE
× BC 600.00	BACK OF CURB SPOT GRADE
× TOW 600.00	TOP OF WALL SPOT GRADE
× BOW 600.00	BOTTOM OF WALL SPOT GRADE

GENERAL NOTES:

1. SEE SHEET C500 FOR EROSION CONTROL NOTES.
2. TRACKOUT CONTROL TO BE INSTALLED PER DETAIL.
3. ALL SPOT GRADES ARE FINISHED GRADE UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE MUNICIPALITY EROSION CONTROL ORDINANCE AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
5. EXCESS SOILS ARE TO BE HAULED OFF SITE OR ENCLOSED WITH AN APPROVED SEDIMENT CONTROL DEVICE WITHIN 24 HOURS.
6. SOIL PILES LEFT UNDISTURBED FOR 7 OR MORE DAYS WILL NEED TO BE STABILIZED BY AN APPROVED METHOD.
7. ALL DISTURBED AREAS NOT COVERED BY PERMANENT STRUCTURES OR PAVEMENT SHALL BE FINISHED GRADED WITH 3"–6" TOPSOIL, SEEDED AND STABILIZED WITHIN 7 DAYS OF REACHING FINAL GRADE.

DEVELOPER/OWNER INFORMATION:
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REVISION SCHEDULE

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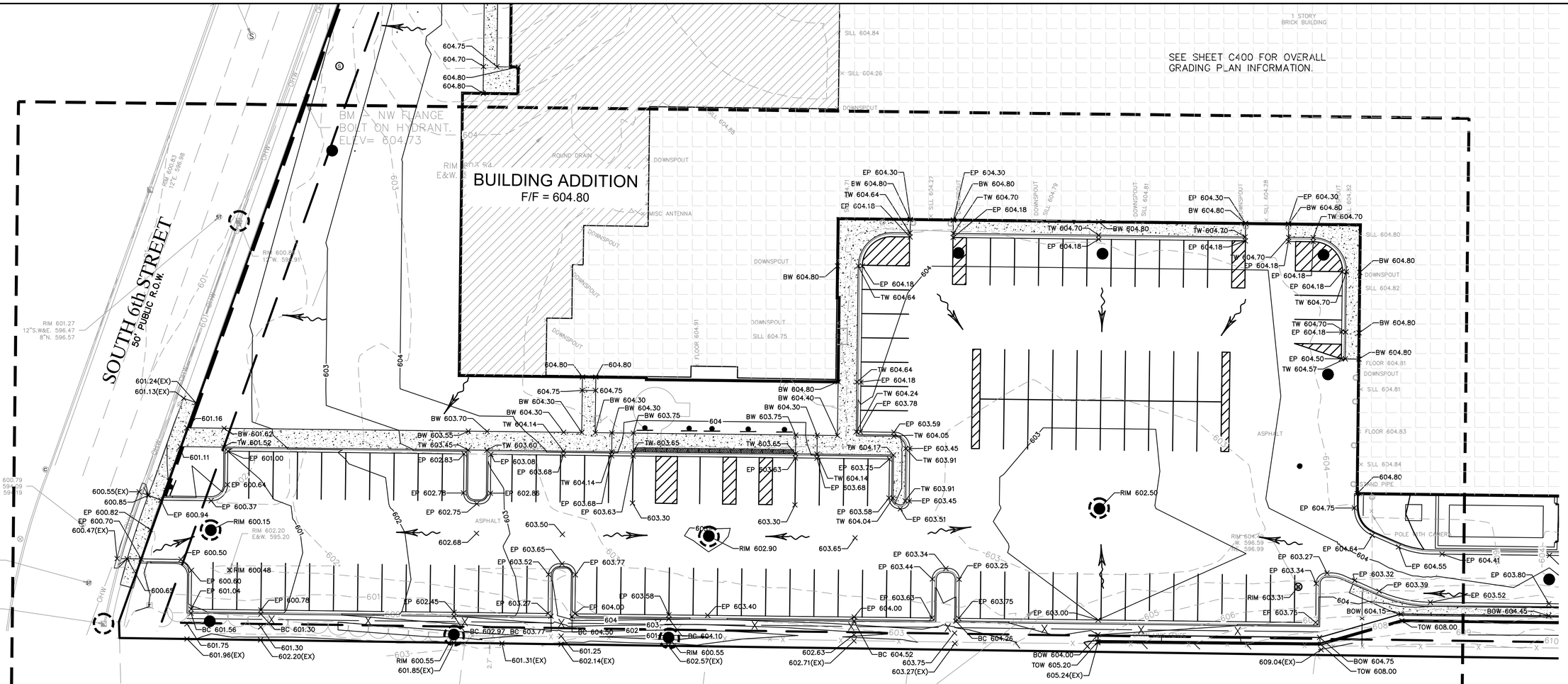
OVERALL GRADING & EROSION CONTROL PLAN

C400



LEGEND

- INDICATES EXISTING PROPERTY LINE
- INDICATES 18" HIGH SIDE CURB & GUTTER
- SILT FENCE (SEE DETAIL)
- TRACKOUT CONTROL (SEE DETAIL)
- SURFACE WATER FLOW
- STORM DRAIN INLET PROTECTION (SEE DETAIL)
- 600 PROPOSED CONTOUR & SPOT GRADE
- 600 EXISTING CONTOUR & SPOT GRADE
- × 600.00(EX) EXISTING SPOT GRADE TO MATCH
- × 600.00 FINISHED ELEVATION SPOT GRADE
- × RIM 600.00 RIM ELEVATION SPOT GRADE
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GRAPHIC SCALE
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(IN FEET)

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GENERAL NOTES:

1. SEE SHEET C500 FOR EROSION CONTROL NOTES.
2. TRACKOUT CONTROL TO BE INSTALLED PER DETAIL.
3. ALL SPOT GRADES ARE FINISHED GRADE UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE MUNICIPALITY EROSION CONTROL ORDINANCE AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
5. EXCESS SOILS ARE TO BE HAULED OFF SITE OR ENCLOSED WITH AN APPROVED SEDIMENT CONTROL DEVICE WITHIN 24 HOURS.
6. SOIL PILES LEFT UNDISTURBED FOR 7 OR MORE DAYS WILL NEED TO BE STABILIZED BY AN APPROVED METHOD.
7. ALL DISTURBED AREAS NOT COVERED BY PERMANENT STRUCTURES OR PAVEMENT SHALL BE FINISHED GRADED WITH 3"–6" TOPSOIL, SEEDED AND STABILIZED WITHIN 7 DAYS OF REACHING FINAL GRADE.

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REVISION SCHEDULE

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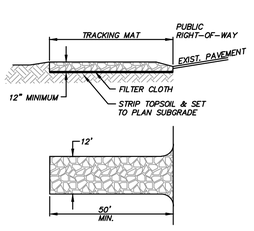
PARKING GRADING PLAN

C401

EROSION CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS. CONTRACTOR IS RESPONSIBLE FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
2. ALL INSTALLATION AND MAINTENANCE OF EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARD.
3. ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH THE DNR WPDES GENERAL PERMIT.
4. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD. NEEDED REPAIRS WILL BE MADE IMMEDIATELY.
5. ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN DAYS OR MORE SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH IN ACCORDANCE WITH THE WDNR TECHNICAL STANDARDS 1059 AND 1058.
6. TEMPORARY SEED MIXTURE SHALL CONFORM TO 630.2.1.5.1.4 OF THE WISDOT STANDARD SPECIFICATIONS. USE WINTER WHEAT OR RYE FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 1.
7. DISTURBED AREAS THAT CANNOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION BY SEEDING AND MULCHING DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION, SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM) IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050.
8. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT REACHES HALF THE HEIGHT OF THE FENCE. THE SILT FENCE SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
9. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 PRIOR TO DISCHARGE TO WATERS OF THE STATE, WETLANDS, OR OFFSITE.
10. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING ON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL TEMPORARY SEDIMENT TRAPS IN VARIOUS LOCATIONS THROUGHOUT THE PROJECT. TEMPORARY SEDIMENT TRAPS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1063.
11. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.
12. DUST CONTROL SHALL BE PROVIDED AS NECESSARY IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1068.
13. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
14. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE APPROVED LANDSCAPE PLAN TO MAINTAIN A VIGOROUS DENSE VEGETATIVE COVER.



CONSIDERATIONS:

1. VEHICLES TRAVELING ACROSS THE TRACKING PAD SHOULD MAINTAIN A SLOW CONSTANT SPEED.
2. THE BEST APPROACH TO PREVENTING OFF-SITE TRACKING IS TO RESTRICT VEHICLES TO STABILIZED AREAS.
3. IT IS ALWAYS PREFERABLE TO PREVENT SEDIMENT FROM BEING DEPOSITED UPON THE ROAD THAN CLEANING THE ROAD LATER. SEDIMENT ON A ROAD CAN CREATE A SAFETY HAZARD AS WELL AS A POLLUTION PROBLEM.
4. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, BEFORE THE END OF EACH WORKING DAY.

NOTES:

A. TRACKING PAD:

1. THE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
2. THE AGGREGATE FOR TRACKING PADS SHALL BE IN ACCORDANCE WITH WDNR TECH STANDARD 1057 TABLE 1 AS SHOWN BELOW.

SIEVE SIZE	PERCENT BY WEIGHT PASSING
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

3. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PRACTICE, STONE TRACKING PADS SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOIL INTO THE STONE.
4. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE AT A MINIMUM 50 FEET LONG.
5. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY FROM TRACKING PADS OR CONVEYED UNDER AND AROUND THEM BY USING A VARIETY OF PRACTICES, SUCH AS CULVERTS, WATER BARS, OR OTHER SIMILAR PRACTICES.

B. TIRE WASHING: IF CONDITIONS ON THE SITE ARE SUCH THAT THE SEDIMENT IS NOT REMOVED FROM VEHICLE TIRES BY THE TRACKING PAD, THEN TIRES SHALL BE WASHED UTILIZING PRESSURIZED WATER BEFORE ENTERING A PUBLIC ROAD.

1. THE WASHING STATION SHALL BE LOCATED ON-SITE IN AN AREA THAT IS STABILIZED AND DRAINS INTO SUITABLE SEDIMENT TRAPPING OR SETTLING DEVICE.
2. THE WASH RACK SHALL CONSIST OF A HEAVY GRATING OVER A LOWERED AREA. THE RACK SHALL BE STRONG ENOUGH TO SUPPORT THE VEHICLES THAT WILL CROSS IT.

C. ROCKS LODGED BETWEEN THE TIRES IF DUAL WHEEL VEHICLES SHALL BE REMOVED PRIOR TO LEAVING THE CONSTRUCTION SITE.

TRACKOUT CONTROL DETAIL

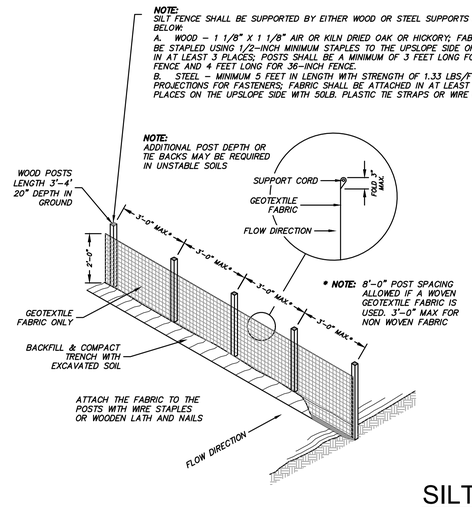
SHALL BE ACCORDANCE WITH WDNR TECHNICAL STANDARD 1057

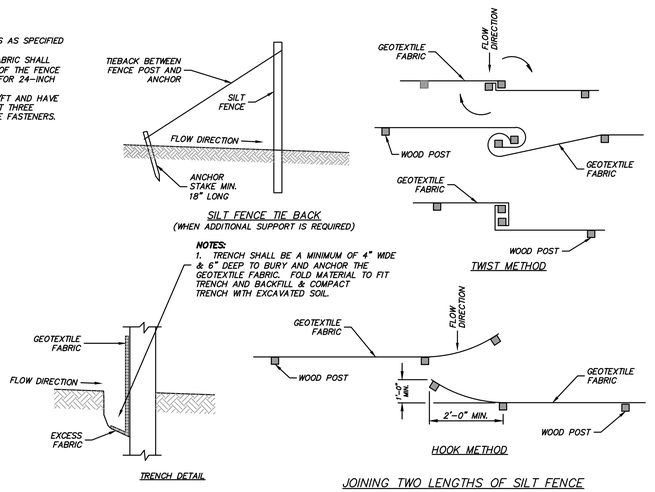
NOTES:

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

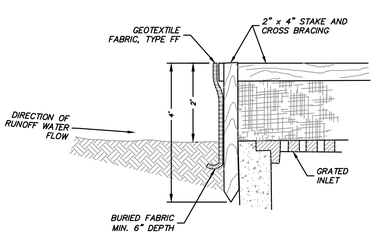
SLOPE	FENCE SPACING
< 2%	100 FEET
2 TO 5%	75 FEET
5 TO 10%	50 FEET
10 TO 33%	25 FEET
> 33%	20 FEET

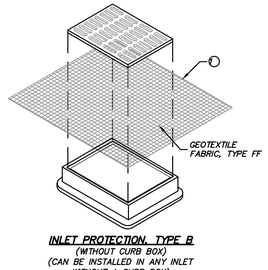
4. INSTALLED SILT FENCES SHALL BE MINIMUM 14 INCHES HIGH AND A MAXIMUM OF 28 INCHES IN HEIGHT MEASURED FROM THE INSTALLED GROUND ELEVATION.
5. A MINIMUM OF 20 INCHES OF THE POST SHALL EXTEND INTO THE GROUND AFTER INSTALLATION.
6. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF THE FABRIC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



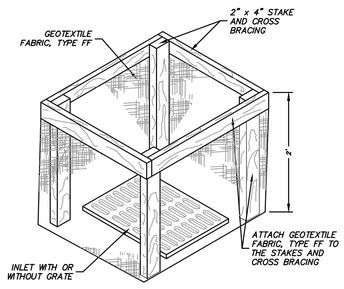


SILT FENCE DETAIL

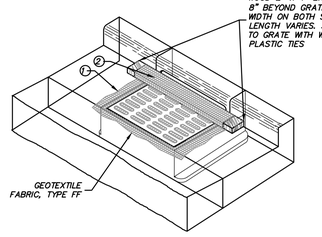




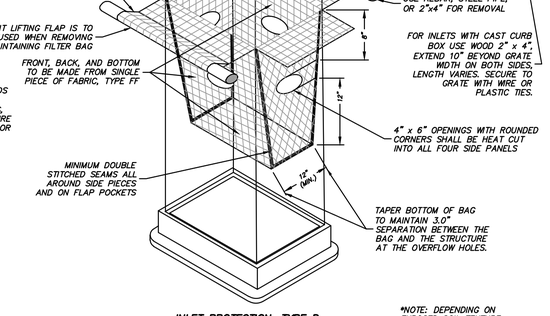
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE C
(WITH CURB BOX)



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

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

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

GENERAL NOTES:

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

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

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

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

TYPE B SHALL BE USED AFTER THE CASTING AND GRATE ARE IN PLACE, ON INLETS WITHOUT A CURB BOX WHEN TYPE D INLET DEVICES CANNOT BE USED.

TYPE C SHALL BE USED AFTER THE CASTING AND GRATE ARE IN PLACE, ON STREET INLETS WITH CURB HEADS.

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

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

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

INSTALLATION NOTES:

TYPE B & C:
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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

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

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

MAINTENANCE:

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

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

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

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

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

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

STORM DRAIN INLET PROTECTION DETAIL

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	RMM

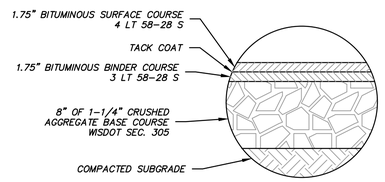
Project Status	Issue Date
PLAN COMMISSION REVIEW	4-8-22

REVISION SCHEDULE

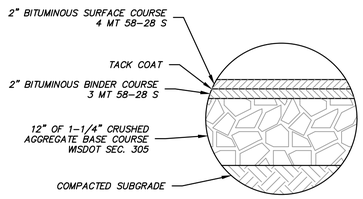
REV. #	DESCRIPTION	DATE

SITE DETAILS

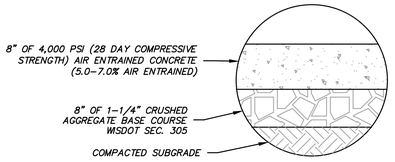
C500



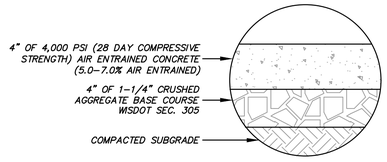
BITUMINOUS PAVEMENT (LIGHT DUTY)



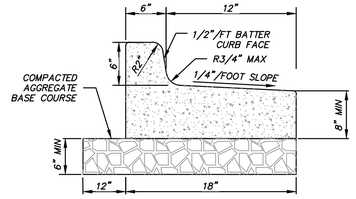
BITUMINOUS PAVEMENT (HEAVY DUTY)



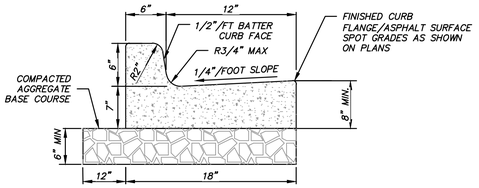
CONCRETE PAVEMENT SECTION



CONCRETE SIDEWALK SECTION



18" REJECT CURB AND GUTTER



18" STANDARD CURB AND GUTTER

NOTES:

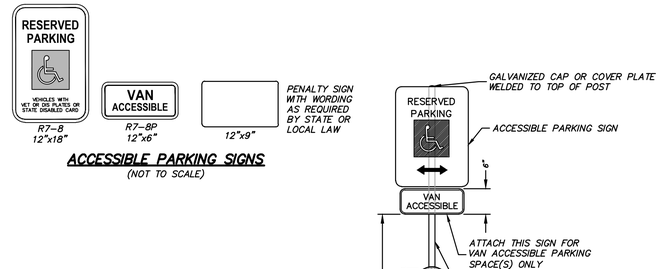
A) 4,000 PSI CONCRETE SHALL BE USED IN CONSTRUCTION OF THE CURB & GUTTER.

B) THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A MINIMUM 8" GUTTER THICKNESS MAINTAINED. TRANSVERSE CONTRACTION JOINTS SHALL BE CUT OR SAWED AT MAXIMUM 10 FOOT INTERVALS.

C) 1/2" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED TRANSVERSELY IN THE CURB ABUTTING EXISTING CURB AND SIDEWALK, WALLS OR BUILDINGS, AND AT INTERVALS NOT TO EXCEED 300 FEET, WITH PREFERRED LOCATIONS BEING AT RADIUS POINTS OR ANGLE POINTS.

CONCRETE CURB & GUTTER DETAIL

N.T.S.



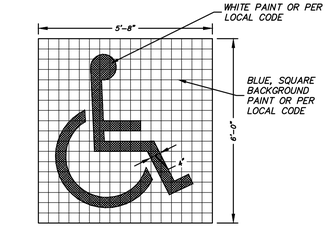
ACCESSIBLE PARKING SIGNS

(NOT TO SCALE)

SIGN AND POST INSTALLATION – TYPE 3

FOR ALL ACCESSIBLE PARKING STALLS IN PAVEMENT AREAS

(NOT TO SCALE)



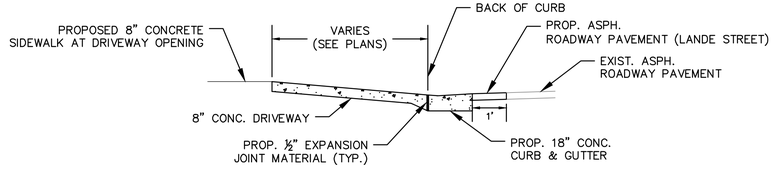
4"x4" GRID FOR LAYOUT PURPOSES ONLY FOR ALL ACCESSIBLE AND VAN ACCESSIBLE SPACES

ACCESSIBLE PAINTED SYMBOL DETAIL

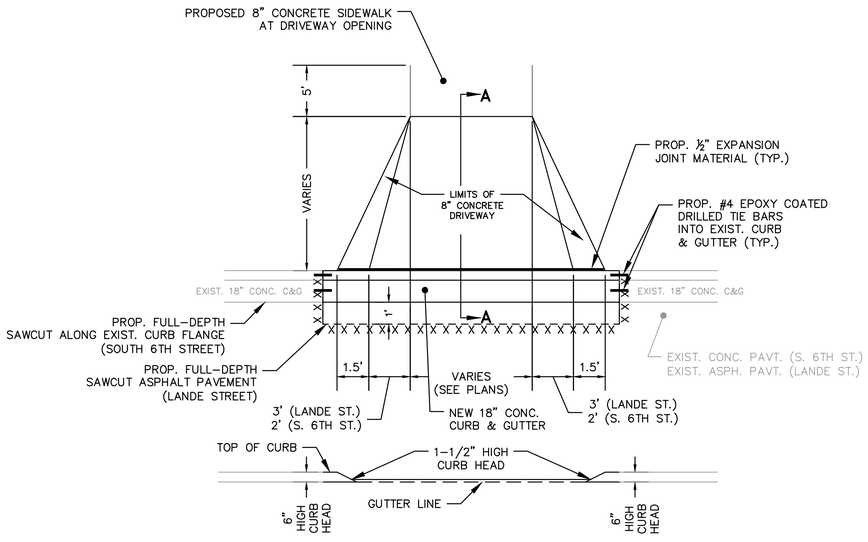
(NOT TO SCALE)

ADA PARKING DETAILS

N.T.S.

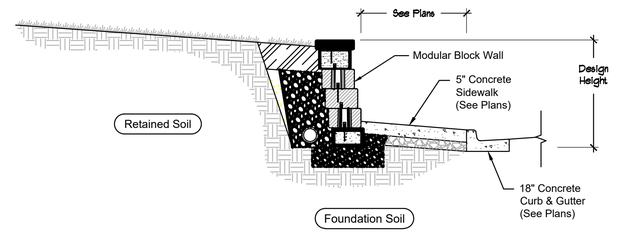


SECTION A–A



CONCRETE DRIVEWAY APRON DETAIL

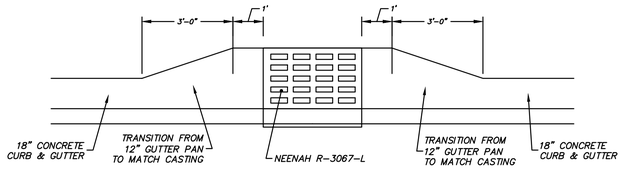
N.T.S.



Contractor shall submit wall design and shop drawings to the engineer for approval of the type of materials that will be used for construction of a modular block wall prior to construction.

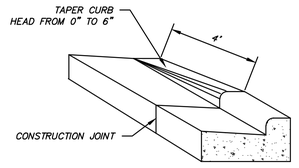
TYPICAL MODULAR BLOCK WALL SECTION

N.T.S.



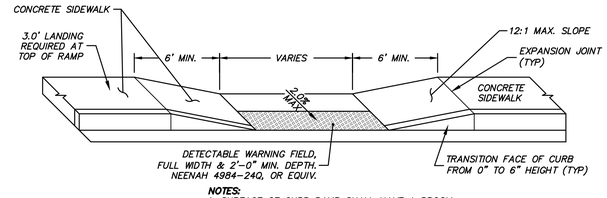
CURB & GUTTER TRANSITION AT STORM INLET DETAIL

N.T.S.



CONCRETE CURB END TAPER DETAIL

N.T.S.



NOTES:

1. SURFACE OF CURB RAMP SHALL HAVE A BROOM FINISH OR SIMILAR SLIP RESISTANT SURFACE.

DEPRESSED SIDEWALK CURB RAMP TYPE 7B

N.T.S.

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	RMM

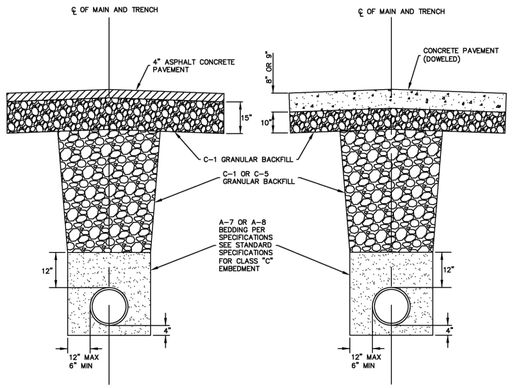
Project Status	Issue Date
PLAN COMMISSION REVIEW	4-8-22

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

SITE DETAILS

C501



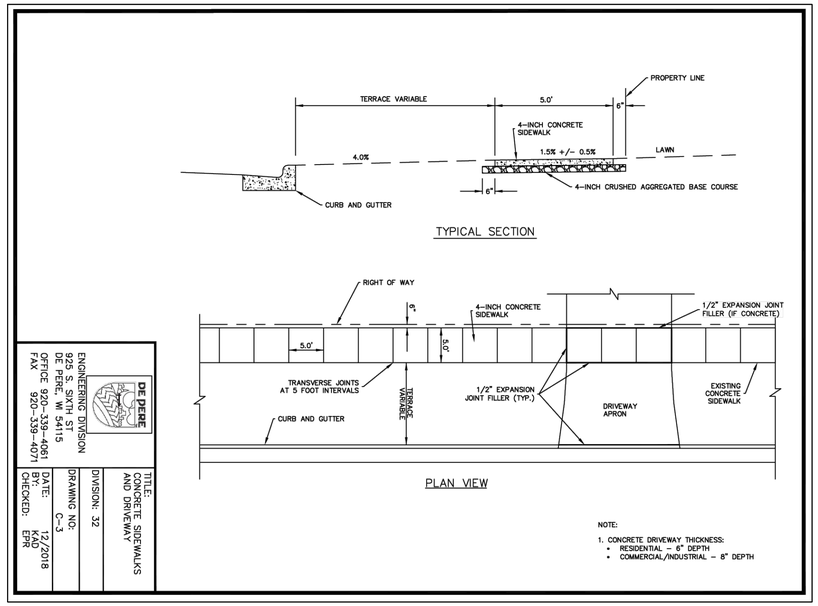
ASPHALT PAVEMENT BACKFILL

CONCRETE PAVEMENT BACKFILL

NOTES:

1. SIDE SLOPE BELOW ELEVATION ON FOOT ABOVE OF PIPE SHALL BE VERTICAL.
2. BACKFILL TO ONE FOOT ABOVE THE TOP OF THE PIPE SHALL BE TAMPED UNDER AND AROUND THE PIPE.

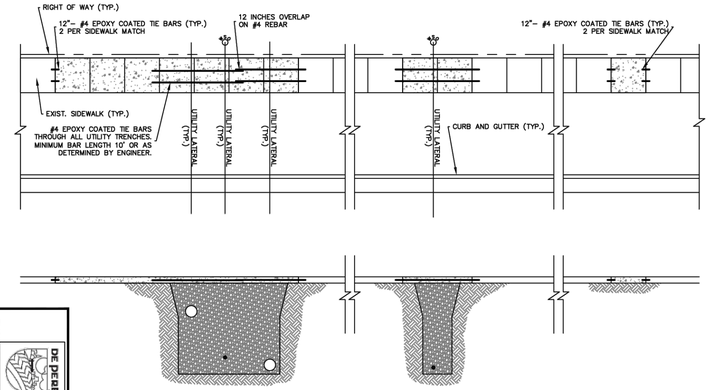
DE PERE	TITLE: TRENCHING AND BACKFILLING
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	DIVISION: 31 DRAWING NO: TB-1 DATE: 12/2018 BY: KAD CHECKED: EPR



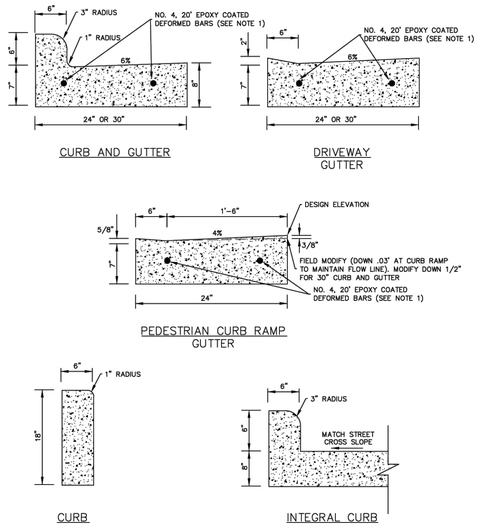
NOTE:

1. CONCRETE DRIVEWAY THICKNESS:
   - RESIDENTIAL – 6" DEPTH
   - COMMERCIAL/INDUSTRIAL – 8" DEPTH

DE PERE	TITLE: CONCRETE SIDEWALKS AND DRIVEWAY
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	DIVISION: 32 DRAWING NO: C-3 DATE: 12/2018 BY: KAD CHECKED: EPR



DE PERE	TITLE: CONCRETE SIDEWALK REINFORCEMENTS
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	DIVISION: 32 DRAWING NO: C-4 DATE: 12/2018 BY: KAD CHECKED: EPR



NOTES:

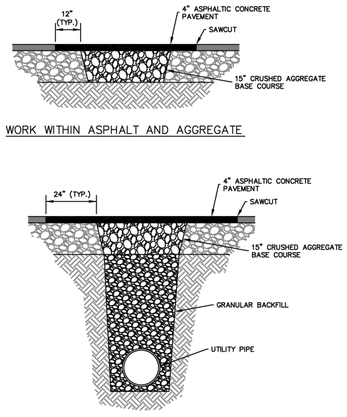
1. 2–NO. 4, 20' EPOXY COATED DEFORMED BARS SHALL BE INSTALLED CENTERED OVER EACH SERVICE AND UTILITY TRENCH OR AS DIRECTED BY THE ENGINEER. FOR TRENCHES LYING UNDER THE CURB AND RUNNING PARALLEL TO THE CURB THE BARS SHALL BE INSTALLED FULL LENGTH OF THE TRENCH.
2. ALL EXPOSED EDGES OF THE CONCRETE SHALL BE FINISHED WITH AN EDGING TOOL HAVING A RADIUS OF 1/4 INCH UNLESS OTHERWISE NOTED.

DE PERE	TITLE: CONCRETE CURB CURB AND GUTTER AND GUTTER
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	DIVISION: 32 DRAWING NO: C-5 DATE: 12/2021 BY: KAD CHECKED: EPR

NOTE:

1. THE ENDS OF ALL CONCRETE WORK SHALL BE MARKED WITH A STAMP AS SHOWN, WITH THE CURRENT YEAR.
2. THE DATE OF CONSTRUCTION SHALL BE STAMPED ON ALL CONCRETE PAVEMENTS AND ALLEYS WITH 1–INCH NUMERALS AT THE ENDS OF EACH SECTION PAVED.

DE PERE	TITLE: CONCRETE STAMP
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	DIVISION: 32 DRAWING NO: C-8 DATE: 12/2019 BY: KAD CHECKED: EPR



DE PERE	TITLE: EXCAVATION IN ASPHALT PAVEMENT
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920-339-4061 FAX 920-339-4071	DIVISION: 32 DRAWING NO: P-1 DATE: 12/2018 BY: KAD CHECKED: EPR

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	RMM

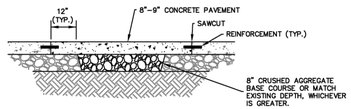
Project Status	Issue Date
PLAN COMMISSION REVIEW	4-8-22

REVISION SCHEDULE

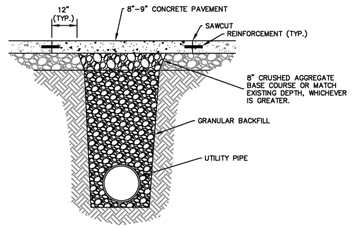
REV. #	DESCRIPTION	DATE

SITE DETAILS

C502



WORK WITHIN CONCRETE AND AGGREGATE

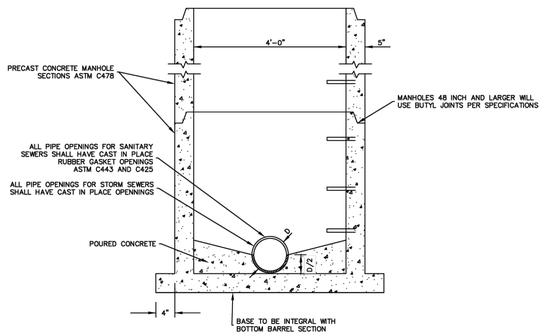


EXCAVATION EXTENDS INTO THE SUBGRADE

NOTE:

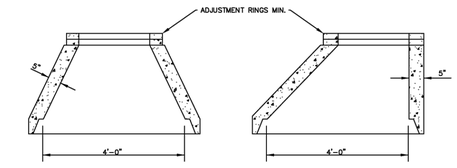
1. INSTALL REINFORCEMENT PER SPECIFICATIONS.

DE PERE	TITLE: EXCAVATION IN CONCRETE PAVEMENT
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920–339–4061 FAX 920–339–4071	DIVISION: 32 DRAWING NO: P–3 DATE: 12/2019 BY: KAD CHECKED: EPR



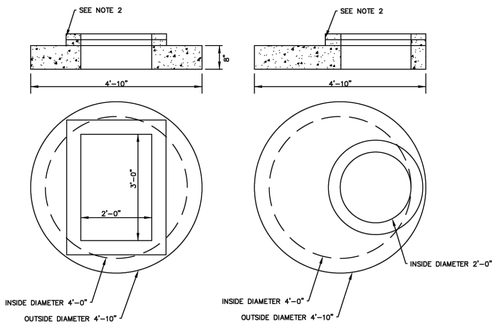
DE PERE	TITLE: PRECAST CONCRETE MANHOLE
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920–339–4061 FAX 920–339–4071	DIVISION: 33 DRAWING NO: S–1 DATE: 12/2018 BY: KAD CHECKED: EPR

MANHOLES:
NEENAH R–1500 FRAME & SOLID LID
(NON–ROCKING)



CONCENTRIC CONE
WHERE DIRECTED BY ENGINEER

ECCENTRIC CONE STANDARD



INLET MANHOLE COVER

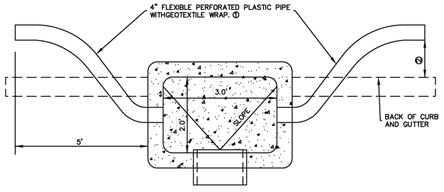
MANHOLE COVER

NOTE:

1. THE TOP ADJUSTING RING (MINIMUM OF 2" AND MAXIMUM OF 3") ON ALL MANHOLES AND INLETS THAT FALL WITHIN THE PAVEMENT SHALL BE RUBBER RISER RINGS.
2. ASPHALT STREET:
   - MIN. 2–2" ADJUSTMENT RINGS, BOTTOM RING CONCRETE AND THE TOP RING RUBBER.

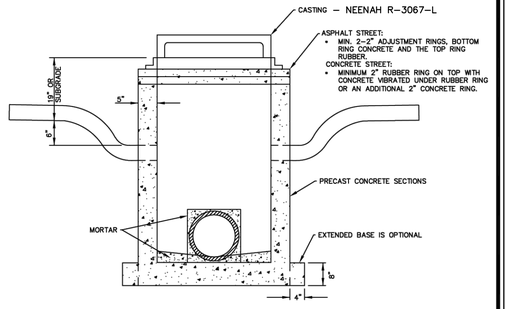
   CONCRETE STREET:
   - MINIMUM 2" RUBBER RING ON TOP WITH CONCRETE VIBRATED UNDER RUBBER RING OR AN ADDITIONAL 2" CONCRETE RING.

DE PERE	TITLE: PRECAST CONCRETE CONES AND COVERS ASTM C478
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920–339–4061 FAX 920–339–4071	DIVISION: 33 DRAWING NO: S–3 DATE: 12/2018 BY: KAD CHECKED: EPR



① IF THERE IS LESS THEN 5' OF CURB AND GUTTER BEING REPLACED, EXTEND TO THE LIMITS OF THE CURB AND GUTTER REPLACEMENT.

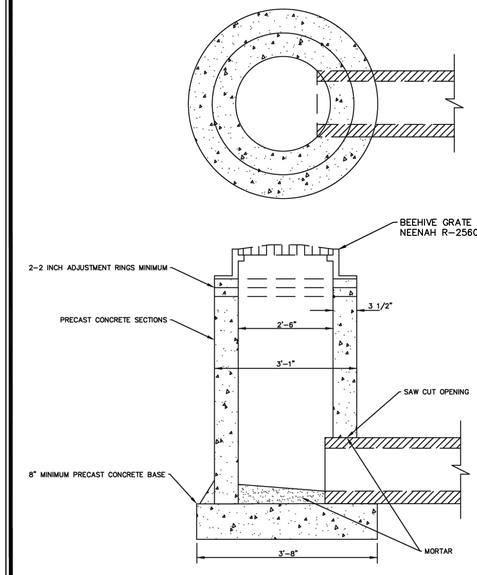
② EDGE DRAIN TO BE LOCATED AT EDGE OF CRUSHED AGGREGATE BASE COURSE.



NOTES:

1. THE MINIMUM DEPTH OF TYPE B INLETS FROM GRATE TO BOTTOM OF BASE SHALL BE 4'–8".
2. PROVIDE INLET BARRIERS FOR NEW CONSTRUCTION.
3. TYPE B INLETS SHALL MEET ALL SPECIFICATIONS OF ASTM C478.
4. 1", 2" OR TAPERED RUBBER RINGS ARE ACCEPTABLE TO PROVIDE FOR FIELD CONDITIONS.

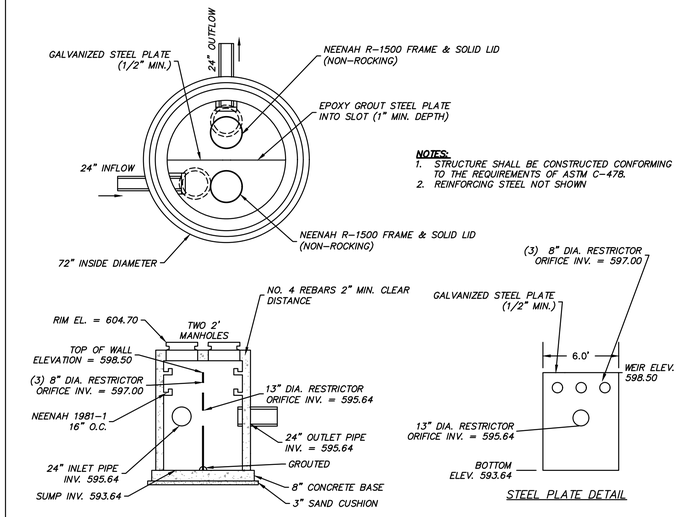
DE PERE	TITLE: TYPE B INLET
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920–339–4061 FAX 920–339–4071	DIVISION: 33 DRAWING NO: S–6 DATE: 12/2018 BY: KAD CHECKED: EPR



NOTE:

1. THE MINIMUM DEPTH OF FIELD INLETS FROM GRATE TO BOTTOM OF BASE SHALL BE 4'–8".

DE PERE	TITLE: TYPE A FIELD INLET
ENGINEERING DIVISION 925 S. SIXTH ST DE PERE, WI 54115 OFFICE 920–339–4061 FAX 920–339–4071	DIVISION: 33 DRAWING NO: FI–1 DATE: 12/2018 BY: KAD CHECKED: EPR



OUTLET CONTROL STRUCTURE DETAIL

N.T.S.

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

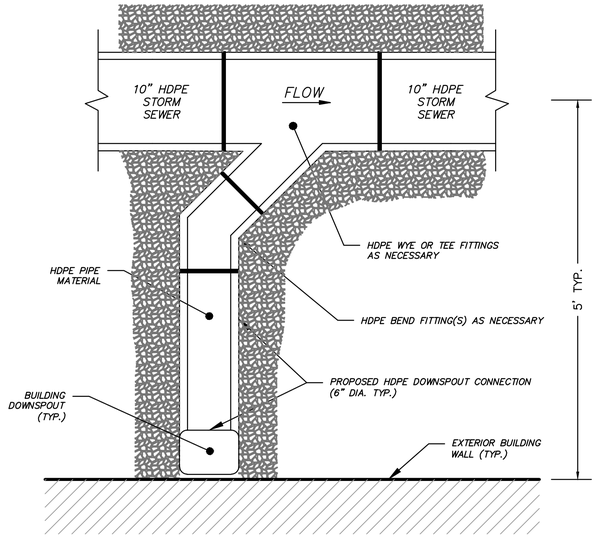
Project Status	Issue Date
60% CIVIL PLANS	9-29-25

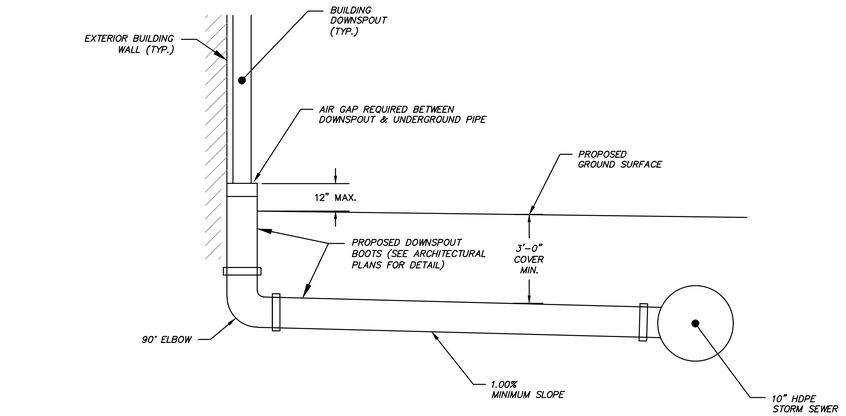
REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

SITE DETAILS

C503



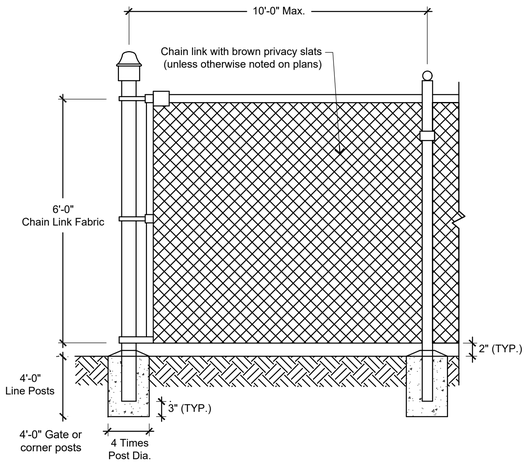


NOTES

1. WATER TIGHT CONNECTIONS SHALL BE MAINTAINED WITH ALL FITTINGS AND PIPE CONNECTIONS.

DOWNSPOUT CONNECTION DETAIL

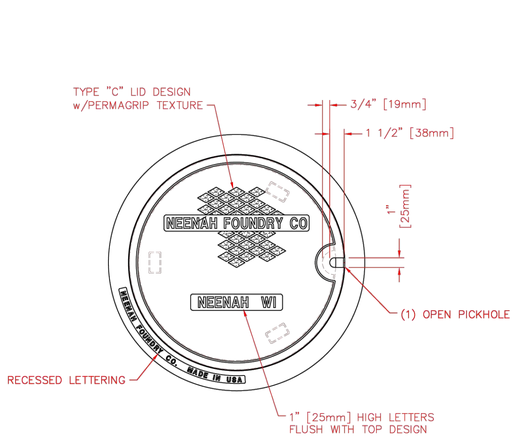
N.T.S.

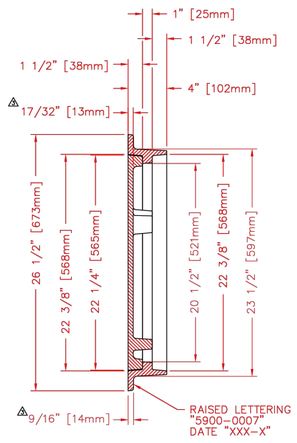


Contractor shall submit shop drawings to engineer for approval of the size, type, and gauge of materials that will be used for construction of a chain link fence prior to construction.

CHAIN LINK FENCE DETAIL

N.T.S.





NOTE ALL DIMENSIONS ARE SHOWN IN ENGLISH AND [METRIC].
COMPONENT NO'S: FRAME 5900-0007, LID 5900-0265
NOTE: DRAFT ANGLE IN SEAT IS 5°.
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
WEIGHT: FRAME - 81#, LID - 79#

REV.	DATE	REVISION	
4	01-20-2004	CHANGED LID DETAILS PER THE NEW PATTERN.	ELR
3	05-30-2003	CHG. LID & FLANGE THICKNESS, ADD STACK LUGS PER COMP. DWGS.	CSK
2	08-15-1997	CORRECTED FRAME DIMS	ELR
1	02-14-1996	ADDED METRIC	CSK
			INT

DR. E. REMME
CH.
APP.
DATE 2-03-92

SCALE 1/8"=1"
DIM CHK.

TITLE: R-5900-E FRAME AND PLATEN LID

NEENAH FOUNDRY COMPANY NEENAH WISCONSIN 54956

NF- 5900 230 B

CAD DWG. REF: 5900 230.DWG- 5

SEH

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

NOT FOR CONSTRUCTION

Project Owner

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Checked By	BH
Drawn By	YT

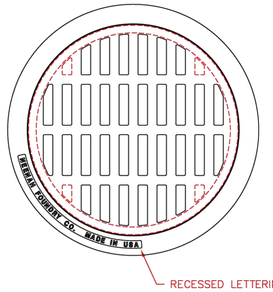
Project Status	Issue Date
60% CIVIL PLANS	9-29-25

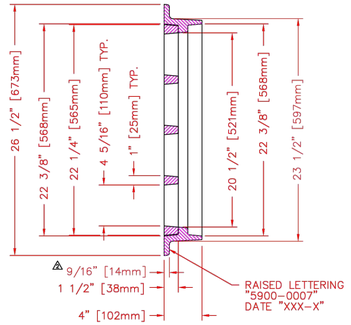
REVISION SCHEDULE

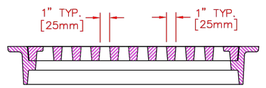
REV. #	DESCRIPTION	DATE

SITE DETAILS

C504







NOTE: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND [METRIC].
DRAFT ANGLE IN SEAT IS 5°
COMPONENT NO'S; FRAME 5900-0007; GRATE 5901-0002
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
WEIGHT: FRAME 81#; GRATE 86#

3	05-30-2003	CHG. FLANGE THICKNESS, WAS 1/2" CSK
2	08-15-1997	CORRECTED FRAME DIMS ELR
1	DATE	REVISION INT

DR. CSK	SCALE 1/8"=1"	TITLE: R-5901-E FRAME AND GRATE	
CH.			
APP.	DIM CHK. O.K.	NEENAH FOUNDRY COMPANY NEENAH WISCONSIN 54956	NF-5901 240 B
DATE 6-30-94			

CAD DWG. REF: 5901 240.DWG- 3

n:\2210208\Dwg\2025 Dwg\Plan Set\2210208-DETAILS01.dwg, C505 SITE DETAILS, 11/12/2025 9:45:59 AM, y_t

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

Project Status	**Issue Date**
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

SITE DETAILS

C505

PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 609 LF

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = N/A
- PIPE STORAGE VOLUME = 23,447 CF
- BACKFILL STORAGE VOLUME = 0 CF
- TOTAL STORAGE PROVIDED = 23,447 CF

PIPE DETAILS
- DIAMETER = 84"
- CORRUGATION = 5x1
- GAGE = 14
- COATING = ALT2
- WALL TYPE = SOLID
- BARREL SPACING = 24"

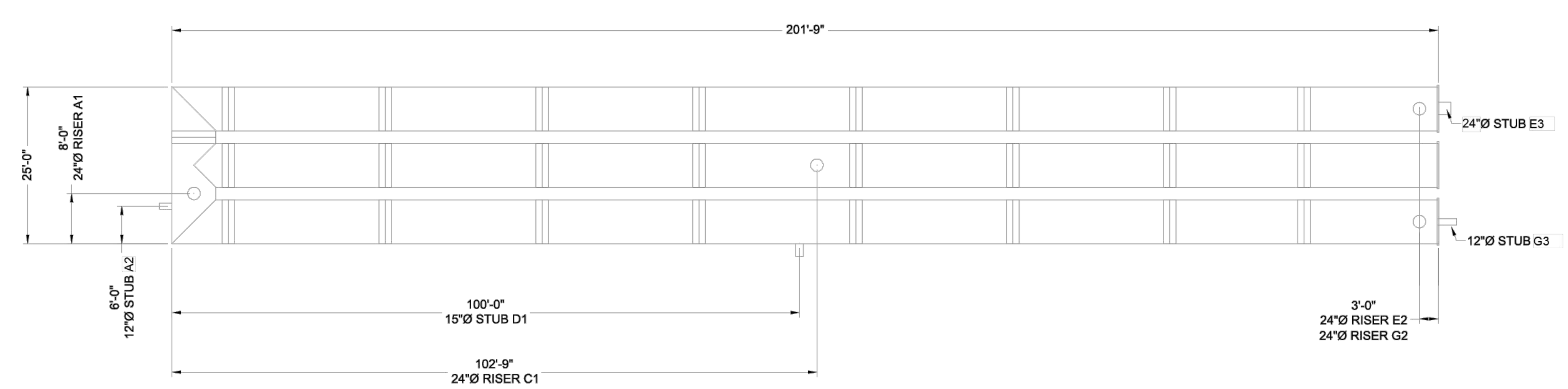
BACKFILL DETAILS
- WIDTH AT ENDS = 12"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 0"

STUB INFORMATION

PIECE	STUB INVERT	SYSTEM INVERT
12"Ø STUB A2	596.57	592.14
15"Ø STUB D1	597.32	592.14
24"Ø STUB E3	595.64	592.14
12"Ø STUB G3	597.86	592.14

RISER INFORMATION

PIECE	RISER RIM	SYSTEM INVERT
24"Ø RISER A1	602.91	592.14
24"Ø RISER C1	603.12	592.14
24"Ø RISER E2	604.40	592.14
24"Ø RISER G2	604.81	592.14



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

C:\EXPORTS\TEMPLATES\CMP_V8.DWG 10/18/2019 10:02 AM

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO14910 De Pere Municipal Service Center Expansion
84" CMP Underground System (4-6-22)
De Pere, WI
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
9434	14910	4/6/2022

DESIGNED:	DRAWN:
DYO	DYO
CHECKED:	APPROVED:
DYO	DYO
SHEET NO.:	1

SEH®

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

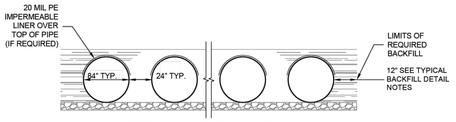
Project Status	**Issue Date**
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

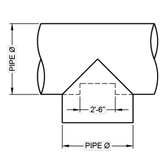
SITE DETAILS

C506

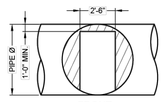


TYPICAL SECTION VIEW
NOT TO SCALE

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.



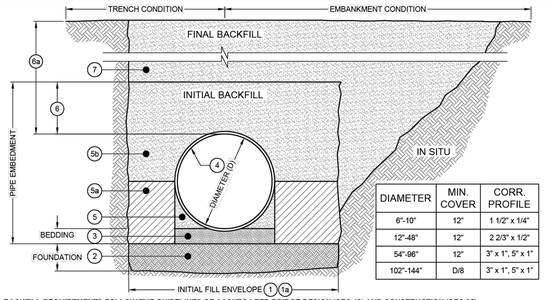
PLAN



FRONT

48"Ø to 90"Ø FITTING REINFORCEMENT MAY BE REQUIRED BASED ON HEIGHT OF COVER AND LIVE LOAD CONDITION

TYPICAL MANWAY DETAIL
NOT TO SCALE



DIAMETER	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
54"-96"	12"	3" x 1", 5" x 1"
102"-144"	D/8	3" x 1", 5" x 1"

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.
THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": 1.5D + 12"

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE < 24": 3.0D
PIPE 24" - 144": D + 4'0"
PIPE > 144": D + 10'0"

2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).

3 BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE GRANULAR MATERIAL (CA-7) THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).

4 CORRUGATED STEEL PIPE (CSP / HEL-COR).

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).

5a INITIAL BACKFILL FOR PIPE EMBEDMENT SHALL BE FREE DRAINING ANGULAR WASHED STONE 3/8" MINIMUM PARTICLE SIZE (CA-7). COMPACTED TO 90% STANDARD PROCTOR (T 99).

5b GRANULAR ROAD BASE TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).

6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.

6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).

7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

NOTES:
- GEOTEXTILE SHOULD BE CONSIDERED FOR USE TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER. CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.8.7-1).

TYPICAL BACKFILL DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO14910 De Pere Municipal Service Center Expansion
84" CMP Underground System (4-6-22)
De Pere, WI
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
9434	14910	4/6/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D2		

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

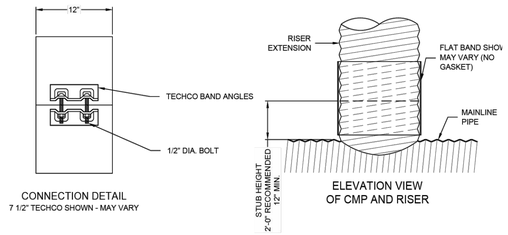
Project Status	Issue Date
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

SITE DETAILS

C507



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

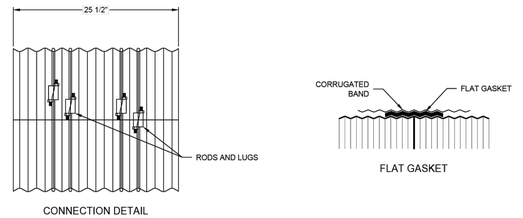
ELEVATION VIEW
OF CMP AND RISER

PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" 2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



CONNECTION DETAIL
4 RODS AND LUGS

FLAT GASKET

2 2/3"x1/2" RIVETED PIPE

GENERAL NOTES:

1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54" THRU 96" 2-PIECES
   - 102" THRU 144" 3-PIECES
5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
6. ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
8. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

10-C BAND DETAIL
NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

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9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO14910 De Pere Municipal Service Center Expansion
84" CMP Underground System (4-6-22)
De Pere, WI
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
8434	14910	4/6/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D3		

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

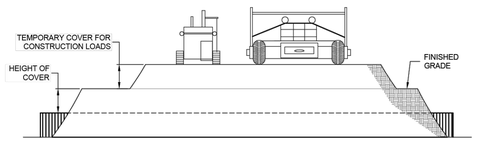
Project Status	**Issue Date**
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

SITE DETAILS

C508



CONSTRUCTION LOADS

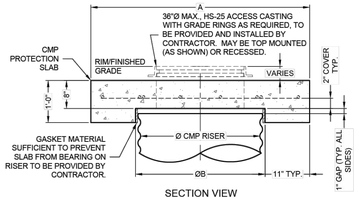
FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM

NOT TO SCALE

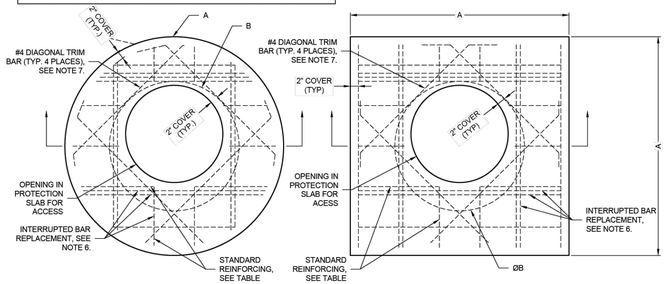


SECTION VIEW

REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW

SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL

NOT TO SCALE

MATERIAL SPECIFICATION

NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONIFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO14910 De Pere Municipal Service Center Expansion
84" CMP Underground System (4-6-22)
De Pere, WI
DETENTION SYSTEM

PROJECT No.: 9434	SEQ. No.: 14910	DATE: 4/8/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D4		

SEH

NOT FOR CONSTRUCTION

Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

Project Status	Issue Date
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

SITE DETAILS

C509

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raSmith
CREATIVITY BEYOND ENGINEERING

100 West Lawrence Street, Suite 412
Appleton, WI 54911-5754
(920) 731-3499
rasmith.com

SEH

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Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
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Project Status	Issue Date
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

FENCE & GATE LAYOUT PLAN

C600

HySecurity
a Nice group company

6705 S 209th St, Ste 101
Kent, WA 98032
253-867-3700
www.hysecurity.com

TECHNICAL SPECIFICATIONS for Model SlideSmart DC™ HD25 Slide Gate Operator with Smart DC Controller 02827 HYS

PART 1 – GENERAL

1.1. INCLUDED IN THIS SECTION

A. Pre-wired, gate operator for horizontal sliding gates, including all selected attachments and accessory equipment.
B. For further information, call Nikki Dinnel, (800) 321-9947, 210-842-6445, ndinnel@hysecurity.com with the manufacturer or visit the website at www.hysecurity.com.

1.2. RELATED WORK SPECIFIED ELSEWHERE

A. Fencing: See section 32 3113.
B. Cast in place concrete: See section 03 3000.
C. Electrical service and connections: See division 26 0513.

1.3. SUBMITTALS

A. Shop drawings: Submit shop drawings under the provisions of Section 01 3300. Submit drawings showing connections to adjacent construction, range of travel, and all electrical and mechanical connections to the operator. All underground runs of electrical lines and inductive vehicle obstruction loop locations shall be indicated on drawings. Drawings shall also show the size and location of the concrete mounting pad and or galvanized mounting posts.
B. Installation instructions: Submit two copies of manufacturer's installation instructions for this specific project.
C. Submit manufacturer's completed warranty registration form to Project Manager.
D. Project list: Submit list of product installations comparable to the subject job. Include date of product installation, installer, and owner's name and location of the project.
E. Test reports:
   1. Submit affidavits from the manufacturer demonstrating that the gate operator mechanism has been tested to 200,000 cycles without breakdown.

1.4. QUALITY ASSURANCE

A. Manufacturer: A company specializing in the manufacture of gate operators of the type specified, with a minimum of five years' experience manufacturing operators of this type and design.
B. Installer: Must have a minimum of three years' experience installing similar equipment, provide proof of attending a HySecurity Technical Training within the previous three years, or obtain other significant manufacturer endorsement of technical aptitude, if required, during the submittal process.

1.5. CODES AND REGULATORY REQUIREMENTS

A. Operators shall be built to UL 325 standards and be listed by a nationally recognized testing laboratory. Complete all electrical work according to local codes and National Electrical Code. All fieldwork shall be performed in a neat and professional manner, completed to journeyman standards.
B. Current safety standards require the use of multiple external sensors to be capable of reversing the gate in either direction upon sensing an obstruction. See also 2.2F
C. Vehicular gates should never be used by pedestrians. A separate pedestrian gate must always be provided when foot traffic is present.
D. Gate must have physical stops to prevent over travel in both the open and close directions.

E. Current safety standards require gate operators to be designed and labeled for specific usage classes.
   1. HySecurity model SlideSmart DC™ HD25 is listed for use in UL 325 Usage Classes: I, II, III, and IV (SlideSmart DC™ HD25 is listed only for use in UL 325 Usage Classes III and IV when speed setting is faster than 1 ft/s).

1.6. PRODUCT DELIVERY AND STORAGE

A. Comply with 01 6000.
B. Store products upright in the original shipping containers, covered, ventilated and protected from all weather conditions.

1.7. WARRANTY

A. Provide a warranty against all defects in materials or workmanship for five years after the date of installation (for single-family residential applications the warranty shall be seven years after the date of shipment from the manufacturer). Defective materials shall be replaced at the manufacturer's discretion with new or reconditioned materials furnished by the manufacturer, at no cost to the owner. Freight, labor and other incidental costs are not covered under the factory warranty, but may be covered by a separate service agreement between installing company and the owner.
   1. To ensure validation of warranty, complete warranty registration form online at www.hysecurity.com/warranty. Warranty registration form is also included in the printed materials shipped with the operator.

PART 2 – PRODUCTS

2.1. GATE OPERATORS

A. HySecurity gate operator model SlideSmart DC™ HD25 with Smart DC Controller, or other comparable operator, as approved by the architect or specifier. Substitute operators that are approved will be published in an addendum, not less than ten days prior to bid opening. Requests for substitution will include the amount of savings to be passed on to the owner.

2.2. OPERATION

A. Operation shall be by means of a brushed DC electric motor driving a single reduction gear reducer with an output sprocket driving #40 plated roller chain. When the gate is stopped, the motor applies a brake to the drive assembly which inhibits any forced, manual operation of the gate. Gate position is constantly monitored allowing for automatic reposition if motion is detected without the operator receiving a run command. The opening and closing speeds are user adjustable 0.75, 1.0, or 1.25 ft/s (228, 304, or 381 mm/s). Operator shall be capable of handling gates up to 50 ft (15,240 mm) in length weighing up to 2,500 lb (1,134 kg). To accomplish this the operator shall offer 450 lb (204 kg) of rated pull force to the gate. Gate Operator shall operate in the event of a power failure in an uninterruptible power supply mode to the extent the two 8Ah batteries can maintain adequate power.
B. Minimum standard mechanical components:
   1. Two piece lockable metal cover. Cover protects bystanders from pinch hazards of roller chain traveling through idlers and drive sprocket.
   2. Chassis to be constructed of 12ga (2.7 mm) or greater steel sheet, welded.
   3. Cover to be constructed of 16ga (1.5 mm) or greater steel sheet, welded.
   4. Finish: Chassis and covers to be powder coat painted black. Other components zinc plated or non-corroding.
   5. Gear Reducer: filled with synthetic lubricant allowing operation down to -13° F (-25° C) without a heater.
   6. Operator shall contain a position sensing device and a means of setting the limit position and maintaining this position in non-volatile memory. Operator must also contain a magnetic absolute position sensor to verify the gate position.
   7. Zinc or nickel plated #40 roller chain with chain mount brackets and connecting hardware.
C. Minimum standard electrical components:
   1. Motor: 1/2 hp brushed DC motor with ball bearings.
   2. Electronic circuit boards to be conformal coated to resist moisture induced failures.
   3. All components shall have overload protection.
   4. Controls: Smart DC Controller Board containing:

   a. inherent entrapment sensor;
   b. built in audible "warn before operate" system;
   c. built in timer to close;
   d. 32 character LCD for reporting of functions and codes with 5 button user interface;
   e. multiple programmable output relay options;
   f. anti-tailgate mode;
   g. built-in power surge/lightning strike protection;
   h. multi-stage intelligent battery charging under microprocessor control;
   i. menu configuration, event logging and system diagnostics easily accessible with a PC and HySecurity's free Smart Touch Analyze and Retrieve Tool;
   j. RS-232 port for connection to laptop or other computer peripheral and RS-485 connection for network interface;
   k. dual gate communication connection for bi-parting, sally port, or sequenced gates;
   l. electromechanical and solid state relays;
   m. radio option outputs;
   n. 15 inputs for site specific configurations;
   o. pulse width modulated control of brushed DC motor using 110A rated solid state switching devices.
   5. Transformer: 250 VA, dual voltage. (N/A for solar model)
   6. Input power: 115V, 208V/230V Field selectable.
   7. Accessory power: 12 VDC, 24 VDC
D. Required external sensors: See 1.5B. Specify photo eyes or gate edges or a combination thereof to be installed such that the gate will reverse in either direction upon sensing an obstruction.
   1. Through Beam photo eyes.
      a. As indicated on drawings
   2. Gate edge.
      a. As indicated on drawings
E. Optional control devices:
   1. HID ProxPro II 5455 RF card reader
      a. As indicated on drawings
   2. HID ProxPro II1326 RD proximity cards
      a. Quantity to be determined by owner
   2. Hy5B plug in type vehicle detectors for free egress loops
      a. As indicated on drawings
   3. Hy5B plug in type vehicle detectors for vehicle obstruction loops
      a. As indicated on drawings
   4. Emergency vehicle open devices as dictated by local code.
F. Optional alert devices: Flashing lights or rotating beacon. Configurable audible beacon included as standard.
G. Stop switch, accessible from outside.
H. Back Drivable: During AC and DC power loss, the gate can be pushed open.
I. Other options:
   1. Extended battery backup using two 50Ah batteries.
   2. Base riser brackets. Also serve as post top mount brackets.
   3. 115V or 230V heater kit

2.3. FACTORY TESTING

A. Fully assemble and test, at the factory, each gate operator to assure smooth operation, sequencing and electrical connection integrity.
B. Check all mechanical connections for tightness and alignment. Check all welds for completeness and continuity.
C. Inspect finishes for completeness. Touch up imperfections prior to shipment.
D. Check all electrical wires to assure that chafing cannot occur during shipping or operation.

PART 3 – EXECUTION

3.1. SITE EXAMINATION

A. Locate concrete mounting pad or galvanized steel mounting posts in accordance with approved shop drawings and in compliance with local building codes.
B. Make sure that gate is operating smoothly under manual conditions before installation of gate operators. Do not proceed until gate panel is aligned and operates without binding.

3.2. INSTALLATION

A. Install gate operator in accordance with the safety regulations and the manufacturer's product literature and installation instructions, current at the time of installation. Coordinate locations of operators with contract drawings; other trades and shop drawings.
B. Installer shall ensure that the electrical service to the operator is at least 15A. Electrical wiring to conform to NEC and manufacturer's installation instructions. SlideSmart DC™ HD25 is 500W.

3.3. FIELD QUALITY CONTROL

A. Test operator through ten full open and close cycles and adjust for operation without binding, scraping or uneven motion. Test limit switches for proper open and close limit positions.
B. All anchor bolts shall be fully tightened in the finished installation.
C. Owner, or owner's representative, shall complete "check list" with installing contractor prior to final acceptance of the installation and submit completed warranty documentation to manufacturer.

3.4. CONTINUED SERVICE AND DOCUMENTATION

A. Train owner's personnel on how to safely shut off electrical power, release and manually operate the gate. Additionally, demonstrate the general maintenance of the gate operator and accessories and provide one copy of "Programming and Operations Manual" for the owner's use. Manuals will identify parts of the equipment for future procurement. Direct maintenance personnel to the technical support sections on HySecurity's website at www.hysecurity.com.

NOTE: HySecurity reserves the right to change these specifications at any time, without notice and without prejudice. Call (800) 321-9947 if you are not sure that you have the latest edition.

CAUTION: Operators manufactured by HySecurity are intended for use in controlling vehicular traffic and are not intended to be used by pedestrians or to control pedestrian traffic. **Always install a separate pedestrian gate.**

SEH

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Project Owner

City of DePere
Municipal Services Center Renovation
925 S. Sixth Street
DePere, WI 54115

SEH Project	161454
Checked By	BH
Drawn By	YT

Project Status	**Issue Date**
60% CIVIL PLANS	9-29-25

REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

GATE SPECIFICATIONS

C601

HySecurity
Simple. Reliable. Secure.

Installation Instructions
Hy5B Vehicle Detector: MX4125

Contents

Hy5B Vehicle Detector Features

- **Automatic Sensitivity** – The Hy5B monitors vehicle traffic over the loop and automatically adjusts the loop sensitivity based on vehicle type and volume.
- **Automatic Gate Compensation** – The Hy5B discerns gate travel over the loop and automatically compensates for its effect. The compensation allows the Hy5B to operate with a higher sensitivity which provides better detection capability.
- **No Loop Crosstalk** – Exclusive use of Hy5B vehicle detectors in HySecurity gate operators, completely eliminates crosstalk and the need to set frequency levels.
- **Vehicle Counting** – Hy5B detects passenger vehicles and motorcycles.
- **Automatic Lightning Suppression** - Where lightning strikes occur often, use of a ground terminal minimizes the chance of detector activation or lock-up.
- **Health Scores for Loop** – Hy5B monitors the loop for changes that are indicative of possible problems. A score is accessible through the event log, LG menu item.
- **Automatic Hy5A emulation mode** for backward compatibility.

Table 1: LED Display Status

LED Activity	Indicates	Condition & Resolution
OFF	Hy5A mode	Emulation mode. Some Hy5B features are unavailable.
GREEN ON	Fault	Call Tech Support.
GREEN PULSING	Heart beat	Normal operation.
RED ON	Call Mode	Status indicates loop activation in process.
RED FLASHING	View display for more information: *Initializing* or *Faulty loop*	If initializing, wait until initialization complete. If flashing during loop operation, take following steps: 1. Check loop wiring. See *Test the Vehicle Loop on page 2.* 2. Replace loop. 3. If loop is not at issue, swap out Hy5B vehicle detector with a known operational Hy5B. 4. If necessary, replace Hy5B.

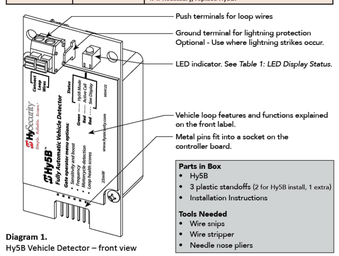


Diagram 1.
Hy5B Vehicle Detector – front view

Hy5B Installation

To install an Hy5B vehicle detector, you will need to take the following steps:

- **Test the vehicle loop**
- **To use all the features of Hy5B, update the software version on the gate operator to the latest version using S.T.A.R.T. and a PC laptop. Access free software updates from the HySecurity website: www.hysecurity.com**
- **Install the Hy5B vehicle detector**
- **Drive a test vehicle over the loops. Fully cycle the gate at least 2 times to allow the detector to adjust to the effects of the gate during travel.**

Test the Vehicle Loop

Run diagnostic tests on the vehicle loops before installing Hy5B vehicle detectors to ensure the loops are in good working condition. The following tests cannot guarantee a functioning loop, but failure of either test means that the loop may be damaged or need to be replaced.

1. Test – Measure the resistance of the loop and lead-in wire. It should not exceed 4.0 ohms.
2. Test – Measure the resistance to earth ground with a Megohmeter (Megger). It should be 100 Megohms or more.

NOTE: Loops may function at 100 Megohms or less, but will not be reliable (for example, when the ground is wet from rainfall). A low megohm reading on the resistance to earth ground usually occurs due to broken or moisture saturated insulation. Be sure to use wire with a direct burial jacket such as XLPE or XHHW wire. Do NOT use THHN wire.

Check the Version of Software

1. In the field, open the Control Box in the gate operator.
2. Press the RESET key on the keypad. The version appears. For Hy5B operation, the version needs to be h4.54 or h5.55 (or higher).
3. If you need to update the software, download the current software and operator code to the controller board before installing Hy5B vehicle detectors. See www.hysecurity.com for information and updates.

NOTE: Hy5A emulation mode does not include all the features of Hy5B. If you are replacing Hy5A detectors and updating the gate operator software, be aware Build Year 1 (BY1) or Build Year 2 (BY2) will need to be addressed. BY2 requires monitoring of external entrapment protection sensors per UL 325 - 2016 Standard of Safety. For more information, refer to the gate operator's product manual.

Install Hy5B Vehicle Detectors

Install one Hy5B detector at a time. Each vehicle detector socket is labeled as shown in *Table 1: LED Display Status*.

1. Turn power OFF in control box. See *Diagram 2. Control Boxes.*
2. Insert the squared-off end of the plastic standoff through the hole in the Hy5B detector. See *Diagram 3. Insert Plastic Standoffs.*

   NOTE: The plastic standoff "squared-off end" does not fit into the mounting holes of the control box. Double check the orientation of squared-off ends.
3. To minimize excessive flexing, keep the Hy5B in a vertical position as you plug it into the Hy5B socket.
4. Place the two wires from the loop into the push terminals of the Hy5B. For ease of installation, the wire gauge should be 20 - 14 AWG.

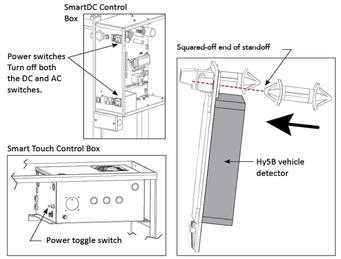


Diagram 2. Control Boxes

Diagram 3. Insert Plastic Standoffs

Table 2: Vehicle Loop Sets

Loop Type	Installer Menu	Loops Smart DC	Loops Smart Touch	Description
Exit Loop	ELD	EXIT LOOP	FREE EXIT	Opens a fully-closed gate.
Inside Reversing Loop	ILD	INSIDE OBSTRUCTION	INSIDE OBSTR	Connects to the inside reversing loop.
Outside Reversing Loop	OLD	OUTSIDE OBSTRUCTION	OUTSIDE OBSTR	Connects to the outside reversing loop.
Reset/Shadow/ Center	SLD/CLD	CENTER LOOP	SHADOW / RESET	Prevents a gate from starting open or closed when a vehicle is in the path of the gate.

NOTE: If power to the operator was turned off, turn it back on.

5. The Hy5B indicator light flashes red and the following appears.

Smart Touch 7-segment Display	STC (OLED) and Smart DC Display
InIt	INITIALIZING

6. When the LED on the Hy5B detector stops flashing red, it flashes green. Initialization is complete and the detector is ready for use.

To install another Hy5B detector, leave the power ON.

1. Press Reset
2. Repeat steps 2 through 6 for each Hy5B detector being installed.

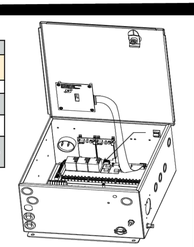
   NOTE: If the Hy5B is unplugged after it is initialized, an alert appears on the display, ALERT 10. If the issue is not resolved, ERROR 3 appears. When faults occur, the gate operator functions as if the Hy5B is triggered.

Pressing the Reset button:

- Clears alerts
- Checks Hy5B loop connections and re-tunes Hy5B to prevent crosstalk
- Un-installs memory of vehicle detectors physically removed

CAUTION

Do not connect Free Exit loop wires to the same Hy5B detector containing obstruction loop wires (reversing loops). You cannot combine Free Exit vehicle detection with reversing loop detection. If you attempt to do so, vehicles crossing over the Free Exit will not be detected.



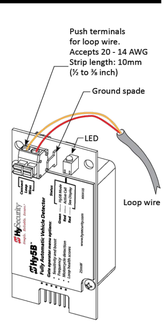


Diagram 4. Hy5B detectors installed

CAUTION

Do not leave excess loop wire coiled in the control box because it can generate false calls.

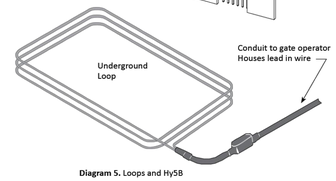


Diagram 5. Loops and Hy5B

Test Loop and Gate Operation

CAUTION

The Hy5B automatically tunes itself to gate movement during the first gate cycle and incorporates boost memory on the second open/close cycle. It is imperative for the safety of vehicular traffic that a minimum of 2 gate cycles is employed so thresholds are acquired and maintained properly. Be sure to test loops and cycle the gate open and close at least 2 times.

1. To initialize Hy5B automatic sensitivity and boost, use a vehicle to drive over the loops and perform a minimum of 3 gate open/close cycles. Make sure the vehicle crosses over all loops.
2. When the gate operator and vehicle loops are functioning properly, carefully replace the gate operator's cover and secure it to the chassis.

NOTE: When you turn on both DC and AC power switches for SlideSmart DC, StrongArmPark DC and WedgeSmart DC the gate, wedge, or arm will move while searching for its home target.

Advanced Loop Configuration via the Installer Menu

Access to the Installer Menu allows you to:

- Adjust the sensitivity
- View the call level, sensitivity, loop inductance, or health in real time
- Set frequency (if using a combination of Hy5B and box vehicle detectors)
- Set call detection presence

NOTE: Installer Menu options can also be configured through the use of a laptop computer and S.T.A.R.T. See Smart Touch Analyze and Retrieve Tool information found on the HySecurity website: www.hysecurity.com

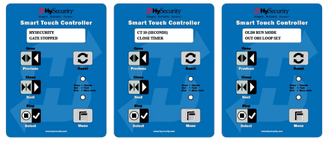


Diagram 6. Smart Touch Gate Status Displays

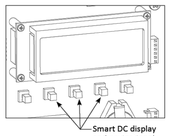


Diagram 7. Keypads

Accessing the Installer Menu

To access the Installer Menu, a gate status must appear on the display (Examples: Gate Stopped, Gate Open, Gate Closed).

1. Press the Menu button twice.
2. Access the Installer Menu by simultaneously pressing and holding the Reset and Open buttons.
3. Release both buttons and the display changes, indicating you have arrived at the first item in the Installer Menu.
4. Use the Next or Previous buttons on the keypad to navigate to a Loop Set socket. See *Table 2: Vehicle Loop Sets on page 3.* For more information on navigating within Menu Mode, see Table 3 below.

Table 3: Menu Mode Navigation Buttons

To change data appearing in the display	To navigate through the Selections	To choose what appears on the display	To navigate between menu items
Press Select. Two left characters blink.	Press Next or Previous. Continue pressing Next to view all selections.	Press Select. Blinking characters become static.	Press Next or Previous. Advance - press Next Previous - press Previous

Setting Gate Function for Reversing Loops

The default setting for a call (detection) on reversing loops is to stop and reverse the gate to full open. The gate operator can be reconfigured to pause gate closure, and then continue traveling in the same direction. To make changes to the setting, you need to access the Installer Menu.

The abbreviated item names appear in the menu as:

7 Segment Display	Smart Display	Description
Or 1	OR 1	Outside Obstruction Loop Detector
Ir 1	IR 1	Inside Obstruction Loop Detector

The tables below describe the Hy5B items that appear in the Smart Touch or Smart DC Installer Menu.

1. Review the label associated with the socket containing the Hy5B vehicle detector.
2. Access the Installer Menu and select the menu item associated with the Hy5B socket. See *Table 2: Vehicle Loop Sets.*
3. When the Installer Menu item is displayed, press SELECT.
4. Press NEXT to scroll through the sub-menu. See tables.
5. Press SELECT to change menu item data (if allowed).
6. To learn how to navigate and select items within the menu tree, refer to, *Table 3: Menu Mode Navigation Buttons on page 4.*
7. To exit to Run Mode, press Menu.

For more information about free exit loop and detector logic settings, refer to your gate operator's product manual.

Diagram 8. Installer Menu Displays

Viewing and Configuring Loop Set Features

Table 4: Loop Frequency, Sensitivity, and Presence

Installer Menu Sub-menu Item	Display	Description
1	SHOW FREQ	Show loop frequency
2	CALL LEVEL	Show CALL strength
3	SET FREQ	Change the frequency setting
4	SHOW SENS	Show the sensitivity setting
5	SET SENS	Change the sensitivity setting
6	SHOW INDUC	Show the loop inductance
7	SHOW HEALT	Show the loop health scores
8	SET PRESEN	Change the CALL hold time setting

NOTE: Do not exceed more than 200 square feet (61 square meters) of loop area to one detector. The detection height is roughly 2/3's the size of the shortest side of the loop.

As a basic guide, if manually reconfiguring loop sensitivity settings, consider:

- On a standard-sized 6 x 6 loop, 0 and 4 provide the lowest sensitivity.
- As the loop's square foot area increases beyond standard-size, it requires a higher sensitivity number to detect same-sized vehicles.

Table 5: Sensitivity Settings via the Installer Menu

Hy5B Sensitivity	LOOP SET Display	Description
A	(AUTO)	**Hy5B only:** Default setting. Automatically monitors vehicular traffic pattern and adjusts sensitivity. Boost feature enabled.
M	(MOTORCY)	**Hy5B only:** Automatically adjusts threshold to incorporate sensitivity for motorcycles. Boost feature enabled.
0	(LOW BST)	**Hy5B & Hy5A:** Manual setting. Lowest sensitivity. Boost enabled.
1	(NORM BST)	**Hy5B & Hy5A:** Manual setting. Boost enabled.
2	(HI BST)	**Hy5B & Hy5A:** Manual setting. Boost enabled.
3	(XHI BST)	**Hy5B & Hy5A:** Manual setting. Highest sensitivity. Boost enabled.
4	(LOW)	**Hy5B & Hy5A:** Manual setting. Lowest sensitivity. No boost.
5	(NORM)	**Hy5B & Hy5A:** Manual setting. No boost.
6	(HI)	**Hy5B & Hy5A:** Manual setting. No boost.
7	(XHI)	**Hy5B & Hy5A:** Manual setting. No boost.

NOTE: A boost feature is needed for detecting unusual vehicular traffic patterns or to assist when environmental factors (electrical or radio interference) exist. Boost increases the sensitivity during a call and is useful for maintaining continuous detection if the signal becomes weak. Sensitivity settings 4 through 7 are the same as 0 through 3, but without the boost feature.

Loop Presence

Geometry of loop and knowledge of site traffic determines best use. Presence is dependent on "disturbance effect" of the entire vehicle. Presence determines how long to hold the "memory" of a stationary vehicle on a loop before it is forgotten and ignored.

A basic guide to setting the presence of the loop:

- LONG (default) lasts about 20 hours dependent on call strength and sensitivity setting. The Hy5B tunes out the "disturbance effect" when a vehicle is stationary on a portion of the loop, but keeps the undisturbed (unaffected) portion of the loop operational.
- INFINITE never drops the call. The INFINITE setting requires a certain amount of signal strength. A "threshold" is maintained and it will hold the call forever. The loop connected to an Hy5B with this setting may become non-functioning.

Table 6: Setting Loop Presence

Installer Menu Sub-menu Item	Display	Example Site Scenario
PR 0	**(LONG)**	With the sensitivity set to A (AUTO) and a large sedan stationary on the loop, LONG presence may hold the call for many hours before the vehicle's presence is tuned out. Then, the stationary vehicle is ignored and the unaffected portion of the loop becomes operational. In contrast, with the sensitivity set to M (MOTORCYCLE), the default threshold only lasts about 1 hour before the presence of the motorcycle on the loop is tuned out.
PR 1	(INFINITE)	A site where standing or parked vehicular traffic (on large area loops) is a daily or consistent basis, the INFINITE presence setting is a viable option. When the loop may have vehicles parked on it for more than several hours and it must hold the call, set the presence to INFINITE.

NOTE: The Hy5B has the ability to continue counting vehicles passing over the loop even though a stationary vehicle may be on a portion of the loop. The controller and Hy5B detector also exchange pertinent information, so if a power failure were to occur, the controller can determine if a vehicle is on the loop when power returns.

Diagram 9. Incorrect installation

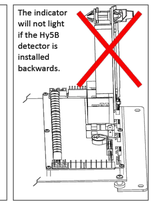


Diagram 10. Incorrect installation

Troubleshooting

The gate operator display shows vehicle detection alerts, faults and errors which can help in troubleshooting loop issues. For a full list of error codes, refer to the gate operator's product manual.

Check that you have accomplished the following, *before* calling Tech Support:

- Tested loop viability and gate operation. Using a vehicle to cross the loops, cycle the gate open & close at least two times to allow for automatic tuning to gate movement and to set appropriate thresholds in Hy5B memory.
- Correctly installed and initialized the Hy5B.
- Verify that the software version on the gate operator is the latest version, you're planning to use all the features of the Hy5B.
- If two loops are attached to the same Hy5B detector, make sure loops are identical in size (sq.ft. area) and number of wire turns. If loops are odd shaped or not identical in form, you may need to manually adjust sensitivity via the Installer Menu or re-install the vehicle loops.

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REVISION SCHEDULE

REV. #	DESCRIPTION	DATE

GATE SPECIFICATIONS

C602

Table 7. Troubleshooting Tips

Symptoms	Problem	Resolution
Intermittent detection. False vehicle loop detection.	Phantom lockups - no vehicle ower loop and detector goes into call mode. Chattering - Hy5B changes call states without evidence of vehicle. Symptoms can also occur when the Hy5B detector is seated improperly during installation. Do NOT flex the module into place. See Diagrams 9 & 10. The Hy5B module remains undamaged, but the socket on the Controller has been loosened or damaged.	Use Hy5B detectors. Mixing box detectors and Hy5B detectors can cause intermittent issues. Cable wiring, electrical/radio interference can also be a problem. 1. Access the Event Log. (User Menu setting, LG). Call levels show in the event log. A low call level could indicate a bad loop or loop wires may have moved or slipped. If the call level is too high (level 7), it may indicate false trips are occurring. Either case, the sensitivity may need adjusting. 2. Reseat and re-initialize. *See Install Hy5B Vehicle Detectors on page 2. Do NOT* flex the module into place. See Diagrams 9 & 10. 3. Exchange a known "working correctly" Hy5B for the one in question. Replace Hy5B , if necessary. 4. Run both tests discussed in *Test the Vehicle Loop on page 2.*
Gate does not always open or close when a vehicle crosses the obstruction loops.	Most likely, the Hy5B detectors were connected to the controller as a group and then initialized.	1. Individually install each Hy5B module. 2. Wait until the indicator light turns off before pressing the Reset button and installing the next Hy5B detector.
No indicator light appears on the Hy5B detector.	Hy5A emulation mode. Normal operation. If you planned to use Hy5B mode, the Hy5B detector is installed backwards or it could be defective.	1. Test the loop. If the LED flashes red, the loop and vehicle detector are working properly. 2. Check the orientation of the Hy5B detector and re-install it, if necessary. If using Hy5B mode, a green LED indicator should blink when the detector is operating properly.
ALERT 7 FREQ SHIFT FAULT	Hy5B detector has detected a frequency change outside the normal range.	1. Test loop viability. See *Test the Vehicle Loop on page 2.* 2. Electrical or radio interference causing problems in the area? 3. Check wiring integrity of the loops.
ALERT 8 LOOP SHORTED	Hy5B detector has detected a short circuit in the loop.	1. Temporarily switch detectors to be sure the loop is at fault. 2. If needed,repair it.

Table 7. Troubleshooting Tips

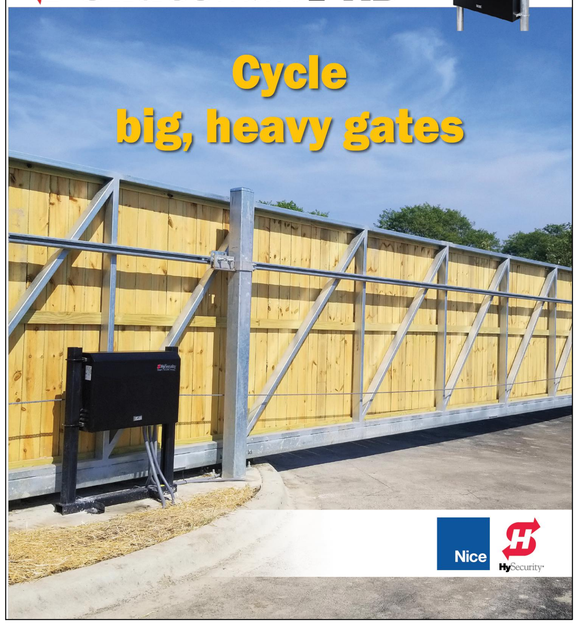
Symptoms	Problem	Resolution
ALERT 9 LOOP OPEN	Hy5B detector has sensed that the loop has become an open circuit.	1. Check all loop wiring connections. 2. If needed, use an ohmmeter to find out where the break is in the loop.
ALERT 10 I²C BUS ERROR	Communications error alert.	Hy5B has been removed or a lack of integrity in the socket connection exists. The display indicates which detector the alert applies to: Exit Loop (ELD), Inside Obstruction Loop (ILD), Outside Obstruction Loop (OLD), Center Loop (CLD). 1. Remove and re-install the Hy5B 2. Press RESET. 3. Replace the Hy5B, if necessary. If communication is not re-established within 30 seconds, the controller will reset and the message changes to ERROR 3.
ALERT 11 DETECTOR FAULT	Unknown fault.	1. Perform the megaohm test and fix the loop, if necessary. 2. Replace the Hy5B if the problem continues.
ALERT 12 ON TOO LONG	The detector believes there has been a vehicle on the loop for more than 5 minutes.	1. Is there something metal on (or near) the loop? 2. Is the sensitivity adjustment set too high? 3. Is the roadway solid? If the underground loop moves it will give false readings. A problem may exist with the loop itself. New loops should read 100 mega-ohms or better, between 50 and 100 operation are generally OK, below 50 mega-ohms, install a new loop. See *Test the Vehicle Loop on page 2.*
ERROR 3 Hy5B FAILED	One or more detectors are not communicating properly.	1. Remove detectors. 2. Reset the controller. 3. Re-install detectors one at a time until faulty detector or loop is found.

Technical Support

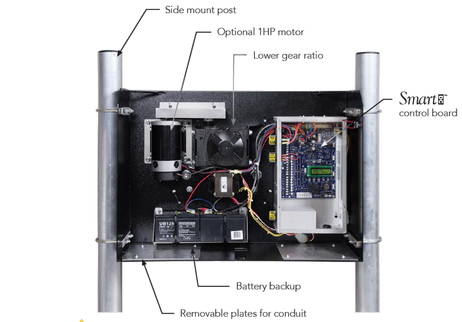
For technical support, call your installer or authorized HySecurity distributor. Obtain the serial number of your operator before calling. For the name of a distributor near you, contact HySecurity at 800-321-9947.

SlideSmart™ HD

Cycle big, heavy gates



Battery Backup. Low maintenance.



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Heavy duty. Commercial.

Quick and easy install

Long life slide gate operator with best in class controller and battery backup.

- Move up to 3,000 lb/50 ft gate
- HD15F moves your gate fast
- Rodent proof heavy duty enclosure
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- Keep your gate moving after power loss: up to 4,000 ft/standard batteries and 25,000 ft/ extended batteries
- Easy system troubleshooting with onboard event log
- Field Programmable to specific site requirements
- Easily retrofit similar profile operators out-of-the-box
- Real time system security alerts with optional HyNet™ Gateway
- 5 year warranty

Optional base extension and retrofit adapter

Family Traits

- Best in class Smart DC™ controls
- 24VDC with battery backup
- Seamless operation with HySecurity accessories
  - HyNet™
  - Hy5B™
- 5 year warranty

Distinctive Features

- For BIG gates up to 3,000 lb
- Sturdy steel enclosure
- Side mount posts
- Fast model available

Residential and Commercial

SYSTEM DESIGN SUPPORT: Contact Nice/HySecurity for help with custom site requirements, CAD drawings, tech manuals or other specifications support.

VISIT HYSECURITY.COM for installation manuals, parts diagrams, wiring diagrams, specifications, image gallery, videos, training and much more.

Slide Gate Operator

3 SlideSmart™ HD Models

	FAST		
Model	**SlideSmart DC HD15F**	**SlideSmart DC HD25**	**SlideSmart DC HD30**
Gate Weight Max.	1,500 lb (680 kg)	2,500 lb (1,134 kg)	3,000 lb (1,361 kg)
Gate Length Max.		50 ft (15 m)	
Pull Force*	300 lb	450 lb	500 lb
Rate of Travel	1.75, 2 or 2.25 ft/s (53, 61 or 69 cm/s) Open/Close speed set independently	0.75, 1 or 1.25 ft/s (23, 30 or 38 cm/s) Open/Close speed set independently	
Duty Cycle	Continuous		
Horsepower	1 hp	1/2 hp	1 hp
Drive	Electromechanical		
UPS Battery Backup Cycles †	Field configurable to fail open or secure when batteries deplete. Standard battery backup gate travel: Two 8Ah batteries. Up to 4,000 ft (1,219 m) after AC power loss. Extended battery backup gate travel: Two 30Ah batteries. Up to 25,000 ft (7,620 m) after AC power loss.		
Temperature Rating	-13° to 158° F (-25° to 70° C)		
Operating Voltage	24VDC		
Input Voltage	115V or 208-230V, 60/50 Hz		
Accessory Power	12VDC and 24VDC 1A each		
Communication	USB, RS-232, RS-485. Ethernet/fiber using optional HyNet™ Gateway accessory		
User Controls	Smart DC Controller with 70+ configurable settings. 32 character LCD display and 5 tact buttons or a PC using S.T.A.R.T. software.		
Relays	Two configurable user relays: 30VDC, 3A solid state and 250VAC, 10A electromechanical; Optional Hy8Relay™ for 8 additional relay outputs		
Finish	Zinc rich primer and black powder coated steel cover/chassis		
ETL Listed (UL 325)	Usage Class III, IV***	Usage Class I, II, III, IV**	
Cycle Tested	500,000 cycles		
Warranty	5 year w/product registration	5 year (7 year single-family residential) w/product registration	

* HySecurity manufacturers only reliable and powerful gate operators and provides an extra margin of power to be certain the gate works in adverse conditions. Some manufactures overstate the length-and-weight capacity of their operators, but HySecurity rates conservatively. Note that our pull force ratings are substantial and that extra margin of power is part of the HySecurity reputation for reliability.

** Speed setting cannot be configured to exceed 1 ft/s for Class I and II usage.

***Not for residential use or applications intended to serve the general public.

† The actual number of gate cycles available from battery depends upon gate resistance to travel, cycle length, battery size, state of charge and health, ambient temperature, accessory power draw and frequency of gate cycles during power outage.

To enable fully automatic operation, all SLIDE gate operators require a minimum of TWO monitored external entrapment protection sensors (one for each direction) to protect entrapment zones in both the open and close direction of travel. Visit www.hysecurity.com/gatesafety for more information on UL 325 standards and gate safety.

Optional Accessories - See website for complete list

Battery Backup Kit - 50 Ah | Base Extension & Retrofit Adapter | HD Heater Kit | Hy5B™ 2.0 Vehicle Detector | Hy8Relay™ Module | HyNet™ Gateway Integration | Photo Eye Kits | ASO Edge Sensors

Nice | HySecurity

Contact Nice | HySecurity for an operator/parts distributor near you.
phone 253-867-3700 | 800-321-9947
hysecurity.com | sales@hysecurity.com

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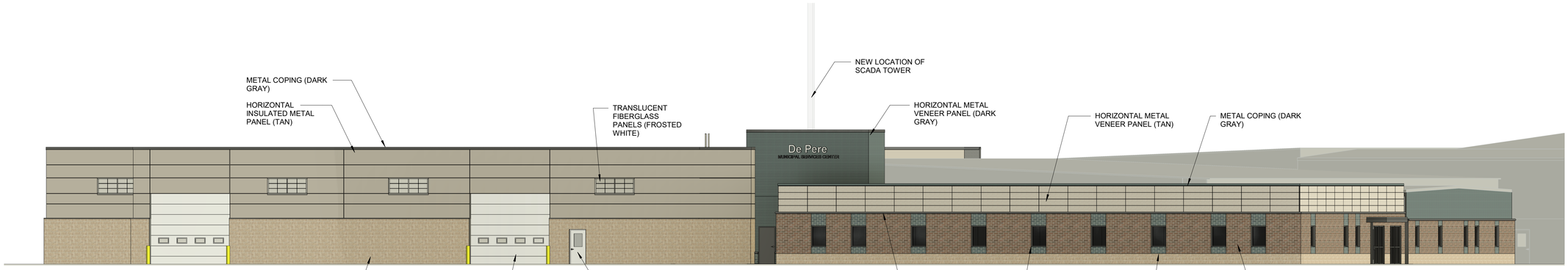
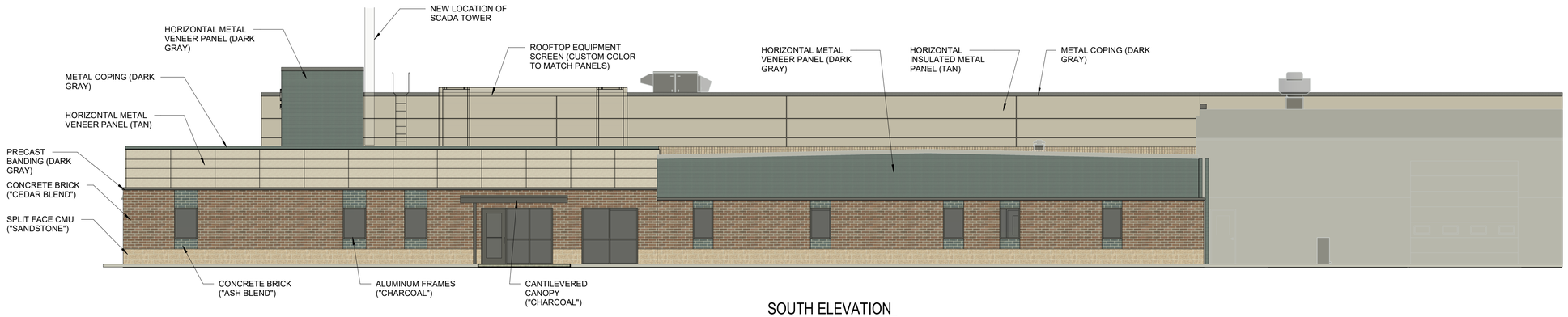
C603

NORTHWEST ELEVATION



SOUTHWEST ELEVATION



SOUTH ELEVATION

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