

PLAN COMMISSION SPECIAL MEETING

Wednesday, January 22, 2025 at 5:30 PM

Council Chambers - City Hall, 3rd Floor 1717 E. Park Street, Two Rivers, WI 54241

AGENDA

1. CALL TO ORDER

2. ROLL CALL

Commission Members: Greg Buckley, Rick Inman, Kay Koach, Kristin Lee, Matt Heckenlaible, Adam Wachowski

3. ACTION ITEMS

A. Review of Site and Architectural Plan for the construction of a Taco Bell restaurant at 1803 Washington Street, submitted by Pacific Bells (applicant) and CEHOG I LLC (owner); Recommendation to City Council (Tabled from January 13, 2025 Meeting)

4. ADJOURNMENT

In accordance with the requirements of Title II of the Americans with Disabilities Act (ADA), the City of Two Rivers will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. If you need assistance or reasonable accommodations in participating in this meeting or event due to a disability as defined under the ADA, please call the City Clerk's office at 920-793-5526 or email <u>clerk@two-rivers.org</u> at least 48 hours prior to the scheduled meeting or event to request an accommodation. For additional assistance, individuals with hearing or speech disabilities can call 711 and be connected to a telephone relay system.

It is possible that members of and possibly a quorum of governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no other action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.



LAND DEVELOPMENT APPLICATION

APPLICANT Pacific Bells (Contact: Kari Keller)		TELEPHONE_714-724-9415		
MAILING ADDRESS 111 W 39th Street	Vancouver	WA	98660	
(Street)	(City)	(State)	(Zip)	
PROPERTY OWNER CEHOG I, LLC		TELEPHONE_847	-904-9201	
MAILING ADDRESS 209 Powell Place	Brewntwood	TN	37027	
(Street)	(City)	(State)	(Zip)	
REQUEST FOR: Comprehensive Plan Amer X Site/Architectural Plan App Subdivision Plat or CSM Re Zoning District Change STATUS OF APPLICANT: XOwner	roval	Conditional Use Annexation Request Variance/Board of Ap Other Buyer <u>x</u> Other	peals	
PROJECT LOCATION 1803 Washington Street	TYPE OF S	TRUCTURE Proposed	1 2,239 sf building	
PRESENT ZONING	REQUEST	ED ZONING_B-1 Busin	ness	
PROPOSED LAND USE Taco Bell restaurant with d	rive-thru			
PARCEL #05300005109106	AC	REAGE 0.63		
LEGAL DESCRIPTION Lots Seven (7), Eight (8), and Nine (9) of BI	lock Fifty-one (51) of the ORIGINA	L PLAT, in the City of Two Rivers	s, Manitowoc County, Wisconsin	

NOTE: Attach a one-page written description of your proposal or request.

The undersigned certifies that he/she has familiarized himself/herself with the state and local codes and procedures pertaining to this application. The undersigned further hereby certifies that the information contained in this application is true and correct.

Signed_	(Property Owner)	Date 12/24/2024
Fee Reg	uired	Schedule
\$ 350	Comprehensive Plan Amendment	Application Submittal Date
\$ t/b/d \$ t/b/d	Site/Architectural Plan Approval (Listed in Sec 1-2-1) CSM Review (\$10 lot/\$30 min)	Date Fee(s) Paid
\$ 350	Subdivision Plat (fee to be determined) Zoning District Change	Plan(s) Submittal Date
\$ 350 \$ t/b/d	Conditional Use Annexation Request (State Processing Fees Apply)	Plan Comm Appearance

- \$ t/b/d \$ 350 Annexation Request (State Processing Fees Apply) Variance/Board of Appeals
- \$ t/b/d Other

\$_

_____ TOTAL FEE PAID APPLICATION, PLANS & FEE RECEIVED BY ____

11/22/16, 03/25/13, 01/01/06, 12/16/20 Land Development Application.docx



December 26, 2024

Project Narrative

Project: Taco Bell 1803 Washington Street Two Rivers, WI

Pacific Bells LLC is requesting site plan and conditional use review and approval for a new Taco Bell quick-serve restaurant with a drive-thru located at 1803 Washington Street in the City of Two Rivers. The property is zoned B-1 Business and the proposed use is permitted. The drivethru use requires a conditional use permit. The 0.63 acre site currently contains a retail store that will be demolished for the proposed project.

The proposed Taco Bell will be single-story with a building footprint of 2,239 square feet with a single drive-thru lane around the north side of the building. A waste enclosure is proposed on the southeast corner of the site. Adequate parking will be provided with 16 spaces (including 1 handicap accessible stall). The existing access to the site from 18th Street will remain and the existing access from Washington St will be reconstructed in the same location.

Exterior materials are represented in the attached color elevations and waste enclosure detail. The building and site will blend in with and enhance the character of the area. The property will be transformed into a commercial development that is aesthetically pleasing with high-quality exterior materials on the building along with landscaping designed to ensure species resiliency and complimentary style. Site lighting will be provided in a fashion that provides appropriate foot candles for safety with cut-off fixtures for minimal light trespass and directed inward toward the development.



January 21, 2025 City of Two Rivers Attn: Adam Taylor 1717 E Park St Two Rivers, WI 54241

Re: Design Committee Review Comments Pacific Bells LLC - Taco Bell at 1803 Washington Street

Dear Adam,

Please accept the resubmittal addressing the review comments from the Design Committee Special Meeting on January 13, 2025 minutes.

- Committee members expressed concerns regarding the proposed structure blocking the recently installed mural, but noted that the mural would provide a pleasant view for drive through customers. Is there another design that could be substituted? Could the location of the building be shifted or placed on a diagonal?
 Excel Response: Shifted the building 10' east to allow the mural to be seen by a stopped northbound car at the intersection of Washington Street and 18th street. See vision triangle on C1.1.
- 2) The committee appreciates the plan to retain and rebrand the existing monument sign. Excel Response: Noted.
- The committee has concerns regarding the impact traffic exiting onto Washington Street may have on the goal of creating a pedestrian friendly downtown.
 Excel Response: Noted. Existing driveway width decreased and driveway revised to exit only.
- 4) The committee had some concern regarding the height of the proposed light poles as they relate to existing light poles on Washington Street, but appreciates that they are IDA compliant.
 Event Because The bright of the poles are shown on the site photometric plan (C2-1) at 22

Excel Response: The height of the poles are shown on the site photometric plan (C3.1) at 23'.

- The committee had some concern as to hours of operation and potential introduction of trash to the downtown.
 Excel Response: Addressed verbally by TM on 1-13-2025.
- The committee approves of the building materials and likes the synergy of the Southwest Purple with the Two Rivers Raiders school colors.
 Excel Response: Noted.

The submittal documents have been revised per the comments above. Please accept for review and approval. Please let me know if you have any comments, questions, or need additional information.

Sincerely,

Eric Drazkowski, P.E. Project Manager

Always a Better Plan -













NEW BUILDING FOR: PACIFIC BELLS LLC TWO RIVERS, WI



PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE TELEFAX (414) 259-0947 TDD (FOR THE HEARING IMPAIRED) 1-800 542-2289

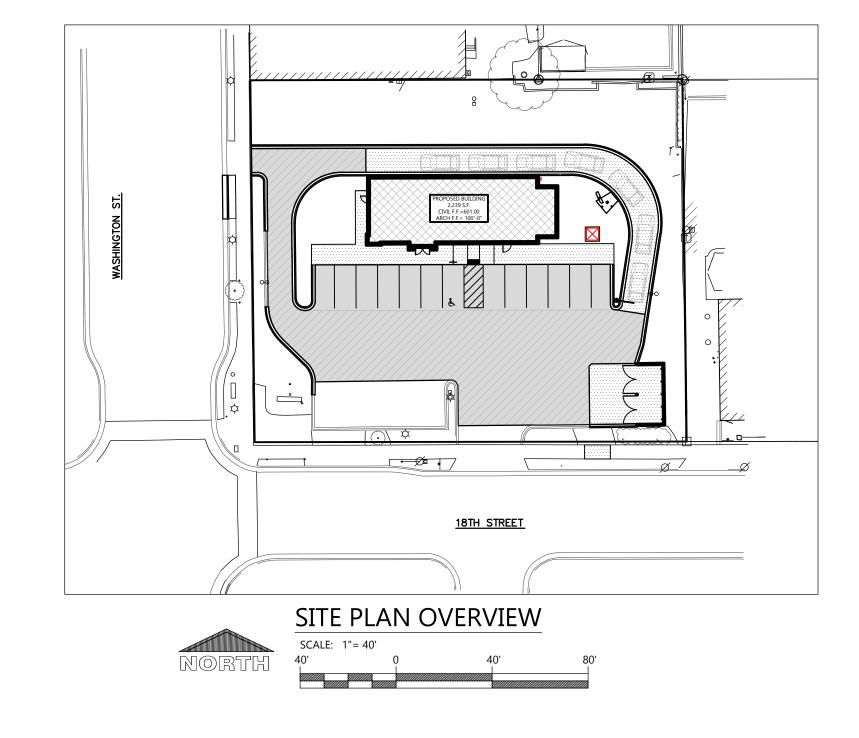
TO OBTAIN LOCATION OF

WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NOTE:

PROPERTY LINES AND EASEMENTS SHOWN ON THIS SURVEY WERE DRAFTED FROM INFORMATION CONTAINED IN TITLE COMMITMENT NO. ____, BY ____ TITLE COMPANY, DATED ___, 20__. AN UPDATED PLAT OF SURVEY, CERTIFIED SURVEY MAP OR ALTA SURVEY HAS NOT BEEN AUTHORIZED.

NOTE SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS PER TICKET NO. 20244618020 HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THIS PLAN IS IN NO WAY A SUBSTITUTE FOR UTILITY LOCATING AT THE TIME OF EXCAVATION.



PROJECT CONTACTS

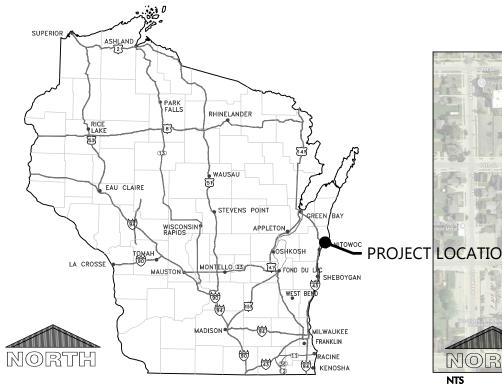
OWNER INFORMATION: Anchor Point ManagEment Kari Keller 111W. 39TH Street

Vancouver, WA 98660 Phone: (714) 724-9415 Email: KKeller@Anchorpointmg.com CIVIL: Eric Drazkowski, P.E. Phone: (920)322-1678 E-mail: eric.drazkowski@excelengineer.com

CITY PLANNER Elizabeth Runge Phone: (920)793-5566 E-mail: erunge@two-rivers.org

CITY ENGINEER/DIRECTOR OF PUBLIC WORKS Matthew Heckenlaible Phone: (920)793-5566 E-mail: mathec@two-rivers.org







CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED B' THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920-926-9800 OR RYAN.W@EXCELENGINEER.COM TO GET STAKING PRICE TO INCLUDE IN BID TO OWNER. PAYMENT OF STAKING COSTS ABOVE AND BEYOND THE BASE PRICE DUE TO RESTAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, NOT THE OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

CITY FIRE CHIEF: Dave Murack Phone: (920)793-5521

CITY BUILDING INSPECTOR Jane Drager Phone: (920)793-5566 E-mail: jdrager@two-rivers.org

PROJECT NOTES

GENERAL PROJECT NOTES

1. ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL ORDINANCES. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.

2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.

CONSTRUCTION STAKING SERVICES

SHEET INDEX

SHEETS BELOW INTENDED TO BE PRINTED IN: COLOR. REFER TO DIGITAL FORMAT DRAWINGS IF PRINTED GRAYSCALE TO ENSURE SCOPE CLARITY.

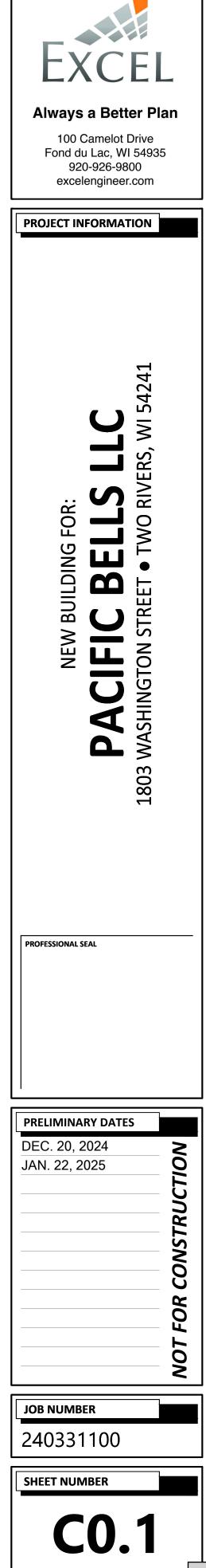
NUMBER	SHEET NAME / DESCRIPTION
C0.1	CIVIL COVER SHEET
C0.2	CIVIL SPECIFICATIONS
C1.0	EXISTING SITE AND DEMOLITION PLAN
C1.1	SITE PLAN
C1.2	GRADING AND EROSION CONTROL PLAN
C1.3	UTILITY PLAN
C1.4	LANDSCAPE AND RESTORATION PLAN
C2.0	DETAILS
C2.1	DETAILS
C3.1	SITE PHOTOMETRIC PLAN & DETAILS

LEG	END
	LS SHOWN MAY NOT APPEAR ON I
<u>SYM.</u>	
SPOT ELEVATION	
• 000.00	PROPOSED SPOT ELEVATIONS (FL UNLESS OTHERWISE SPECIFIED)
• 000.00 EG	EXISTING GRADE SPOT ELEVATION
000.00 BG	PROPOSED SPOT ELEVATIONS (RE DETAIL) BG-FINISHED SURFACE G
• 000.00 FG	FG-FINISHED SURFACE GRADE AT
EXISTING SITE SYI	
	EXISTING SIGN
Ĕ.	EXISTING HANDICAP PARKING ST
8	EXISTING WATER VALVE IN BOX
	EXISTING WATER VALVE IN MANH
×	EXISTING WATER SERVICE VALVE
W	EXISTING WELL
•	EXISTING STORM CATCH BASIN
	EXISTING STORM CURB INLET
	EXISTING SQUARE CATCH BASIN
ά	EXISTING LIGHT POLE
· • •	1-1/4" REBAR SET WEIGHING 4.30
	3/4" REBAR SET WEIGHING 1.50 L
	·
	1-1/4" REBAR FOUND
0	3/4" REBAR FOUND
	2" IRON PIPE FOUND
	1" IRON PIPE FOUND
•	SECTION CORNER
PROPOSED SITE S	YMBOLS
	PROPOSED SIGN
Ŀ,	PROPOSED HANDICAP PARKING S
8	PROPOSED WATER VALVE IN BOX
8	PROPOSED WATER VALVE IN MAN
×	PROPOSED WATER SERVICE VALV
	PROPOSED WELL
	PROPOSED STORM CATCH BASIN
	PROPOSED STORM CURB INLET -
EXISTING LINETYF	PES
0	- EXISTING CHAINLINK FENCE
<u>_</u>	- EXISTING WOOD FENCE
×	- EXISTING BARBED WIRE FENCE
	EXISTING CURB AND GUTTER
	- EXISTING GUARD RAIL
800	EXISTING GROUND CONTOUR
ST	- EXISTING STORM SEWER AND MA
SA	- EXISTING SANITARY SEWER AND I
	EXISTING WATER LINE AND HYDR
<u> </u>	- INTERIOR PROPERTY LINE
PROPOSED LINETY	PES
	- PROPOSED CHAINLINK FENCE
	-PROPOSED WOOD FENCE
	-PROPOSED BARBED WIRE FENCE
	PROPOSED CURB AND GUTTER
• • • •	- PROPOSED GUARD RAIL
800	PROPOSED GROUND CONTOUR
ST	- PROPOSED STORM SEWER AND N
SA	- PROPOSED SANITARY SEWER AND
	PROPOSED WATER LINE AND HYD
777	PROPOSED PROPERTY LINE

Section	З,	ItemA.	

DRAWINGS.		
	<u>SYM.</u>	IDENTIFICATION
	000.00 TC 000.00 FL	PROPOSED SPOT ELEVATIONS (TOP OF CURB, FLOWLINE OF CURB)
EFERENCE R-WALL	000.00 TW	PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK @ FLOWLINE)
GRADE AT BACK OF WALL T FRONT OF WALL	• 000.00 BW	
	Ø	EXISTING UTILITY POLE
ALL	$\not \longrightarrow$	
IOLE		
		EXISTING ELECTRIC BOX EXISTING FLOOD LIGHT
	€ (T)	EXISTING FLOOD LIGHT EXISTING TELEPHONE MANHOLE
		EXISTING CABLE TV PEDESTAL
		EXISTING GAS VALVE
) LB/FT.		EXISTING HEDGE
B/FT.		EXISTING WOODED AREA
	<u>/////</u>	EXISTING MARSH AREA
		EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER
	*	EXISTING CONIFEROUS TREE
		EXISTING SHRUB
	 凡	EXISTING STUMP
	•	PROPOSED STORM FIELD INLET - ST FI
STALL	ЮП	PROPOSED LIGHT POLE
(\rightarrow	PROPOSED DRAINAGE FLOW
NHOLE	> <u></u>	PROPOSED APRON END SECTION
Έ		SOIL BORING
	Ę	CENTER LINE
- ST CB	СО	PROPOSED CLEANOUT
ST CI	DSG	PROPOSED DOWNSPOUT TO GRADE
	DSR	PROPOSED DOWNSPOUT TO RISER
	POL	- EXISTING POLISH SEWER AND MANHOLE
	— Р — (- EXISTING PROCESS SEWER AND MANHOLE
	CLW	- EXISTING CLEAR WATER LINE
	F0	- EXISTING UNDERGROUND FIBER OPTIC LINE
	Е	- EXISTING UNDERGROUND ELECTRIC CABLE
	— т —	- EXISTING UNDERGROUND TELEPHONE CABLE
ANHOLE	G	- EXISTING UNDERGROUND GAS LINE
MANHOLE	OU	EXISTING OVERHEAD UTILITY LINE
RANT		_ RAILROAD TRACKS
		-RIGHT-OF-WAY LINE
	POL	PROPOSED POLISH SEWER AND MANHOLE
	<u> Р </u>	PROPOSED PROCESS SEWER AND MANHOLE
	CLW	PROPOSED CLEAR WATER LINE
	FO	PROPOSED UNDERGROUND FIBER OPTIC LINE
	—— Е ——	PROPOSED UNDERGROUND ELECTRIC CABLE
	т	PROPOSED UNDERGROUND TELEPHONE CABLE
MANHOLE - ST MH		- PROPOSED UNDERGROUND GAS LINE
D MANHOLE - SAN MH	OU	- PROPOSED OVERHEAD UTILITY LINE
DRANT		-MATCHLINE
		- GRADING/SEEDING LIMITS

CIVIL COVER SHEE



CIVIL SPECIFICATIONS

DIVISION 31 EARTH WORK

31 10 00 SITE CLEARING

- A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- B. CONTRACTOR TO FIELD TELEVISE ALL EXISTING SANITARY AND STORM LATERALS THAT ARE SCHEDULED TO BE RE-USED AND/OR CONNECTED TO ON SITE AT TIME OF DEMOLITION. THE TELEVISING SHALL BE COMPLETED TO ENSURE THE EXISTING LATERAL(S) ARE FREE OF OBSTRUCTIONS AND IN SOUND STRUCTURAL CONDITION. TELEVISING OF THESE LATERAL(S) SHOULD BE COMPLETED AT BEGINNING OF CONSTRUCTION AND DESIGN ENGINEER SHALL BE NOTIFIED OF ANY PIPE OBSTRUCTIONS AND/OR STRUCTURAL DEFICIENCIES IMMEDIATELY AFTER COMPLETION OF FIELD TELEVISING
- C. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION. D. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE
- REPLACED AT CONTRACTORS EXPENSE. E. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

31 20 00 EARTH MOVING

- A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE
- RESPONSIBILITY OF THE RESPECTIVE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS. C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.
- D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY
- E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION FOUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDARD PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT. 1. UNDER FOUNDATIONS - SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT.
- 2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
- 3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE- PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
- 4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL
- TO NOT LESS THAN 95 PERCENT. 5. UNDER WALKWAYS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT. 6. UNDER LAWN OR UNPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 85
- G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND
- INSPECTIONS. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF PASSING DENSITY TESTING AND PROOF-ROLLING TO ENGINEER UPON COMPLETION. IT IS SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. H. ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT
- EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING
- WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED
- J. THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS. SITE EARTHWORK SHALL BE GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN

31 30 00 EROSION CONTROL

- A. THE GRADING PLAN REFLECTS LESS THAN 1 ACRE OF DISTURBED AREA. THE SITE IS THEREFORE EXEMPT FROM WISCONSIN DEPARTMENT OF NATURAL RESOURCES NR 216 NOTICE OF INTENT REOUIREMENTS. THE DESIGN ENGINEER SHALL PREPARE AN EROSION CONTROL PLAN TO MEET NR 151.105 CONSTRUCTION SITE PERFORMANCE STANDARDS FOR NON-PERMITTED SITES.
- B. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151, THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS. TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE
- 1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES THAT WILL EXIST FOR MORE THAN 7 DAYS. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1056 (CURRENT EDITION).
- 2. DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1062 (CURRENT FDITION) 3. STONE TRACKING PADS AND TRACKOUT CONTROL PRACTICES SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL
- BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED FOR THE STONE TRACKING PAD SHALL BE 3/8" TO 3 INCH CLEAR OR WASHED STONE AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC AS NEEDED. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. OTHER TRACKOUT CONTROL PRACTICES INCLUDING STABILIZED WORK SURFACES, MANUFACTURED TRACKOUT CONTROL DEVICES, TIRE WASHING, AND STREET/PAVEMENT CLEANING SHALL BE IMPLEMENTED AS NECESSARY TO MITIGATE THE TRACKOUT OF SEDIMENT OFFSITE. FOLLOW PROCEDURES FOUND
- IN WISCONSIN DNR TECHNICAL STANDARD 1057 (CURRENT EDITION) 4. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060 (CURRENT EDITION).
- 5. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068 (CURRENT EDITION)
- 6. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.
- 7. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
- 8. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
- 9. IF SITE DEWATERING IS REQUIRED FOR PROPOSED CONSTRUCTION ACTIVITIES, ALL SEDIMENT LADEN WATER GENERATED DURING THE DEWATERING PROCESS SHALL BE TREATED TO REMOVE SEDIMENT PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE. FOLLOW ALL PROCEDURES FOUND IN TECHNICAL STANDARD 1061.
- 10. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. DUST CONTROL REQUIREMENTS SHALL BE FOLLOWED PER WI DNR TECHNICAL STANDARD 1068 (CURRENT EDITION). FLUSHING SHALL NOT BE ALLOWED.
- C. ALL EROSION CONTROL DEVICES SHALL AT A MINIMUM BE INSPECTED EVERY 7 CALENDAR DAYS OR EVERY 14 DAYS AND WITHIN 24 HOURS OF THE END OF A RAIN EVENT OF 0.5" OR MORE. MAINTENANCE SHALL BE PERFORMED PER WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151 STORMWATER MANAGEMENT TECHNICAL STANDARD REQUIREMENTS. D. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
- E. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.

DIVISION 32 EXTERIOR IMPROVEMENTS

32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

- A. CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 460 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CONTRACTOR SHALL OBTAIN AND REVIEW SOILS REPORT FOR RECOMMENDATIONS FOR GEO-GRID / GEOTEXTILE BELOW CRUSHED AGGREGATE (IF APPLICABLE). CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES AND DEPTHS AS INDICATED BELOW:
- STANDARD ASPHALT PAVING SECTION 1-1/2" SURFACE COURSE (5 LT 58-28S) (WISDOT 455.2.5 TACK COAT (STAGED PAVING) WISDOT 455.2.5 TACK COAT (STAGED PAVING) 2" BINDER COURSE (4 LT 58-28S)
- 10" OF 1-1/4" CRUSHED AGGREGATE
- PLANS. A MINIMUM OF 1.1% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA C. HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION DOCUMENTS.
- D. CONTRACTOR TO PROVIDE 4" WIDE YELLOW PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 20 00 CONCRETE AND AGGREGATE BASE

- A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS. B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND
- STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08 & ACI 318-08. D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:
- 1. SIDEWALK CONCRETE 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" NIDE BY 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS. 2. DUMPSTER PAD/APRON CONCRETE - 8" OF CONCRETE OVER 6" OF AGGREGATE BASE.
- a. CONCRETE SHALL BE STEEL REINFORCED WITH THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB: 1) TIE BARS AT ALL CONTRACTION JOINTS OF THE CONCRETE. TIE BARS SHALL BE #4 REBAR 30" LONG PLACED AT 30" O.C.
- b. DUMPSTER PAD CONCRETE JOINTING SHALL BE AS FOLLOWS: 1) CONTRACTION SAWCUT JOINT - CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER.
- SAWCUT SHALL BE 2" IN DEPTH.
- DOWEL PLACED AT 12" O.C. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE
- 3. HEAVY DUTY CONCRETE (TRUCK TRAFFIC) 6" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE. CONCRETE SHALL BE REINFORCED SHALL BE SAWCUT 1.5" IN DEPTH AND BE SPACED A MAXIMUM OF 15' ON CENTER.
- E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94 1. STRENGTH TO BE MINIMUM OF 4,500 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
- 2. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45. 3. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK
- 4. SLUMP SHALL BE 2.5" OR LESS FOR SLIP-FORMED CURB AND GUTTER
- 5. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SLIP-FORMED CURB AND GUTTER APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
- 7. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES. F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH CONTRACTOR REQUIRING PAD. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W1.4 X W1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 5.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
- G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05' OF DESIGN SURFACE AND FLOWLINE GRADES ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS. H. CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURB AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN.). IF CONCRETE PAVEMENT IS ADJACENT TO CONCRETE CURB, JOINTING IN THE PAVEMENT AND CURB SHALL ALIGN. ALL EXTERIOR CONCRETE SHALL HAVE A BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH
- CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS.
- I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" FOR UP TO #5 BARS AND 2" FOR #6 TO #10 BARS IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 48 DIAMETERS FOR UP TO #6 BARS, 62 DIAMETERS FOR #7 TO #9 BARS, 68 DIAMETERS FOR #10 BARS OR AS NOTED ON THE DRAWINGS AND EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE/OIL. DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 1064. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.
- L CONTRACTOR SHALL ENGAGE A OUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS. PERFORM TESTS AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD., BUT LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM COMPRESSIVE-STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. PERFORM SLUMP TESTING ACCORDING TO ASTM C 143. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
- K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING. BUT BEFORE POWER FLOATING AND TROWELLING.
- L. LIMIT MAXIMUM WATER-CEMENTITIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45. M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH ON SITE. DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.
- N. CONTRACTOR TO PROVIDE 4" WIDE YELLOW PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

HEAVY ASPHALT PAVING SECTION 1-1/2" SURFACE COURSE (5 LT 58-28S) 2-1/2" BINDER COURSE (4 LT 58-28S) 12" OF 1-1/4" CRUSHED AGGREGATE

B. CONTRACTOR TO COMPACT THE AGGREGATE BASE, ASPHALT BINDER COURSE, AND ASPHALT SURFACE COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL ASPHALT PAVEMENT AREAS SHALL BE PAVED TO WITHIN 0.05' OF DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN

2) TYPICAL POUR CONTROL JOINT - POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH

WITH #3 REBARS ON CHAIRS AT 3' O.C. REBAR SHALL BE PLACED PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB. CONTRACTION JOINTS

6. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT

32 30 00 LANDSCAPING AND SITE STABILIZATION

A. TOPSOIL: CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS, OTHER THAN A LANDSCAPE ISLANDS SHALL BE PROVIDED WITH A MINIMUM OF 10" OF TOPSOIL. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN OUANTITIES ARE INSUFFICIENT. EXCAVATOR SHALL BE RESPONSIBLE FOR ROUGH PLACEMENT OF TOPSOIL TO WITHIN 1" OF FINAL GRADE PRIOR TO LANDSCAPER FINAL GRADING. LANDSCAPER TO PROVIDE PULVERIZING AND FINAL GRADING OF TOPSOIL. PROVIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 8, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH SHALL ALSO BE REMOVED.

TOPSOIL INSTALLATION: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE ANY STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION. B. SEEDED LAWNS:

- 1. PERMANENT LAWN AREAS SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 65% KENTUCKY BLUEGRASS BLEND (2.0-2.6 LBS./1,000 S.F.), 20% PERENNIAL RYEGRASS (0.6-0.8 LBS./1,000 S.F.), 15% FINE FESCUE (0.4-0.6 LBS/1,000 S.F.). STRAW AND MULCH SHALL BE LAID AT 100LBS/1.000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EOUIVALENT AT 5-6 LBS/1.000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. ALL SITE DISTURBED AREAS NOT DESIGNATED FOR OTHER LANDSCAPING AND SITE STABILIZATION METHODS SHALL BE SEEDED AS PERMANENT LAWN. NO BARE TOPSOIL SHALL BE LEFT ONSITE. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
- 2. ALL PERMANENT AND TEMPORARY STORM WATER CONVEYANCE SWALE BOTTOMS AND SIDE SLOPES SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 45% KENTUCKY BLUEGRASS (0.60 LBS./1000 S.F.), 40% CREEPING RED FESCUE (0.50 LBS./1,000 S.F.), AND 15% PERENNIAL RYEGRASS (0.20 LBS./1,000 S.F.). FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
- 3. ALL TEMPORARY SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE: 100% RYEGRASS AT 1.9 LBS./1,000 S.F. STRAW AND MULCH SHALL BE LAID AT 100 LBS./1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059. C. SEEDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE
- DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS SHOULD BE ESTABLISHED FREE OF WEEDS AND SURFACE IRREGULARITIES. LAWN COVERAGE SHOULD EXCEED 90% AND BARE SPOTS SHOULD NOT EXCEED 5"X5". CONTRACTOR SHOULD REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY D. EROSION MATTING:
- 1. CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN \$150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER. LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS
- 2. CONTRACTOR TO PROVIDE EROSION MATTING (NORTH AMERICAN GREEN C125) OR EQUIVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS REQUIRED. LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS
- E. SODDED LAWNS: PROVIDE SOD CONSISTING OF THE FOLLOWING GRASS SPECIES 65% KENTUCKY BLUEGRASS, 20% PERENNIAL REVEGRASS 15% FINE FESCUE PROVIDE VIABLE SOD OF UNIFORM DENSITY COLOR AND TEXTURE SOD SHOULD BE STRONGLY ROOTED AND CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED. LAY SOD WITHIN 24 HOURS OF HARVESTING. DO NOT LAY SOD IF DORMANT OR IF GROUND IS FROZEN OR MUDDY. LAY SOD WITH TIGHTLY FITTED BUTT END AND SIDE JOINTS. DO NOT STRETCH OR OVERLAP. STAGGER SOD STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP AND ROLL LIGHTLY TO ENSURE CONTACT WITH TOPSOIL. ANCHOR SOD ON SLOPES EXCEEDING 6:1 SLOPE. PROVIDE SLOW RELEASE FERTILIZER AS RECOMMENDED BY SOD SUPPLIER FOR PROPER LAWN ESTABLISHMENT. SATURATE WITH FINE WATER SPRAY WITHIN 2 HOURS OF PLANTING.
- F. SODDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE FOR ALL SODDED AREAS FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE LAWN SHOULD BE ESTABLISHED. THE LAWN SHOULD BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES. REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY
- G. TREES AND SHRUBS: FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, AND HEALTHY LOOKING STOCK. STOCK SHOULD ALSO BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. SEE THE LANDSCAPE PLAN FOR SPECIFIC SPECIE TYPE, SIZE, AND LOCATION.
- H. TREE AND SHRUB INSTALLATION: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT ROOT BALL. EXCAVATE PIT APPROXIMATELY THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER. SET TREES AND SHRUBS PLUMB AND IN CENTER OF PIT WITH TOP OF BALL 1" ABOVE ADJACENT FINISHED GRADES. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS AND TAMP TO SETTLE MIX. WATER ALL PLANTS THOROUGHLY. PROVIDE TEMPORARY STAKING FOR TREES AS REOUIRED
- TREE AND SHRUB MAINTENANCE/WARRANTY: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. MAINTENANCE TO INCLUDE REGULAR WATERING AS REQUIRED FOR SUCCESSFUL PLANT ESTABLISHMENT. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS.
- J. ORGANIC MULCH: PROVIDE 3" MINIMUM THICK BLANKET OF SHREDDED HARDWOOD MULCH AT ALL PLANTING AREAS INDICATED ON HE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
- K. MINERAL MULCH: PROVIDE 3" MINIMUM THICK BLANKET OF 1.5" MINIMUM TO 2.5" MAXIMUM CRUSHED DECORATIVE STONE AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER. L. PLASTIC EDGING: INSTALL VALLEY VIEW INDUSTRIES BLACK DIAMOND LAWN EDGING TO SEPARATE ALL PLANTING BEDS FROM LAWN
- EAS. EDGING TO BE 5.5" TALL WITH METAL STAKES INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. M. LANDSCAPE AND LAWN IRRIGATION: CONTRACTOR TO PROVIDE DESIGN AND INSTALLATION OF IRRIGATION SYSTEM PIPING, VALVES, VALVE BOXES, SPRINKLERS, EMITTERS, DRIP TUBES, AND CONTROLS IN COMBINATIONS THAT BEST SUIT THE LANDSCAPE PLAN LAYOUT.
- ALL LAWN AND LANDSCAPING AREAS SHALL BE PROVIDED WITH IRRIGATION AS DELINEATED ON THE PLAN. THE DESIGN SHOULD MINIMIZE THE AMOUNT OF WATER THAT EXTENDS REVOND THE PROPERTY AND ON PAVED AREAS. THE SYSTEM SHALL BE DESIGNED FOR FULLY AUTOMATIC OPERATION AND PROVIDE ALL NECESSARY CONTROLS, VALVES, AND WIRING TO OPERATE THE SYSTEM. THE CONTROL UNIT SHALL BE INSTALLED IN A MECHANICAL ROOM OR AT A LOCATION AGREED TO WITH THE OWNER. THE CONTROL UNIT SHOULD BE PROVIDED WITH A LOCKING COVER

Utility	Material	Pipe Code	Fitting Code	Joint Code	Comments
Water Lateral	Type K Copper-Soft	ASTM B-88	ASTM B16.22, ASTM B16.29	ASTM B32 AWS A5.8 BCuP Silver Braze	<2", No Joints below Building
Water Lateral	C901/906 PE	AWWA C901/C906	ASTM D2609, ASTM D2683, ASTM D3261	Heat fusion: ASTM D2657	≤ 4", DR11 (200 psi), SDR 9 (250 psi), Mechanical push-on and compression joints allowed per DSPS plumbing code.
Sanitary Sewer	SDR 35 PVC	ASTM D1785, ASTM D2665, ASTM D3034, ASTM F891	ASTM F1336	Push On: ASTM D3212 for Tightness Elastomeric Gasket: ASTM F477	4"-15", ≤ 20' deep
Storm Sewer	SDR 35 PVC	ASTM D1785, ASTM D2665, ASTM D3034, ASTM F891	ASTM F1336	Push On: ASTM D3212 for Tightness Elastomeric Seal: ASTM F477	4"-15", ≤ 20' deep

DIVISION 33 UTILITIES

33 10 00 SITE UTILITIES

- RESPONSIBILITY
- COMPLETION OF FIELD TELEVISING

- HORIZONTALLY FROM FOUNDATION WALLS.

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS

B. CONTRACTOR TO FIELD TELEVISE ALL EXISTING SANITARY AND STORM LATERALS THAT ARE SCHEDULED TO BE RE-USED AND/OR CONNECTED TO ON SITE. THE TELEVISING SHALL BE COMPLETED TO ENSURE THE EXISTING LATERAL(S) ARE FREE OF OBSTRUCTIONS AND IN SOUND STRUCTURAL CONDITION. TELEVISING OF THESE LATERAL(S) SHOULD BE COMPLETED AT BEGINNING OF CONSTRUCTION AND DESIGN ENGINEER SHALL BE NOTIFIED OF ANY PIPE OBSTRUCTIONS AND/OR STRUCTURAL DEFICIENCIES IMMEDIATELY AFTER

C. ALL SANITARY PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE. ALL SANITARY PIPE BELOW PROPOSED & FUTURE BUILDINGS SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL INSULATION SHALL BE PROVIDED PER STATE PLUMBING CODES AS NECESSARY BASED ON PROPOSED DEPTH PER PLANS. D. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY & STORM SERVICES AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY/STORM SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A (4" OR 6") VERTICAL PVC PIPE WITH A WATER TIGH REMOVABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS REQUIREMENTS. E. ALL PROPOSED WATER PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE. 6' MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE SPECIFIED.

F. ALL PROPOSED STORM PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE. ALL PROPOSED STORM PIPE BELOW BUILDINGS SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED. PIPE SHALL BE PLACED MIN. 8'

G. SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS. H. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MAXIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN STORM SEWER FOR INTERNALLY DRAINED BUILDINGS TO A POINT WHICH IS A MAXIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN DOWNSPOUT LEADS TO BUILDING FOUNDATION AND UP 6" ABOVE SURFACE GRADE FOR CONNECTION TO DOWNSPOUT FOR ALL DOWNSPOUT TO RISER (DSR) CONNECTIONS. DOWNSPOUTS TO GRADE (DSG) SHALL BE PROVIDED WITH SPLASH BLOCKS AT THE DISCHARGE LOCATION. ALL DOWNSPOUT LOCATIONS SHOULD BE VERIFIED WITH ARCHITECTURAL PLANS AND DOWNSPOUT CONTRACTOR/GC PRIOR TO INSTALLATION OF DOWNSPOUT LEADS. DOWNSPOUT LEADS SHALL NOT UNDERMINE BUILDING FOUNDATIONS. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.

ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE) PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE IF ATTACHED. THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET. TRACER WIRE SHALL TERMINATE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AT GRADE OR IN TERMINATION BOX PER LOCAL/STATE REQUIREMENTS. I. ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN". THE EXCEL ENGINEERING DESIGN ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING STATE PLUMBING REVIEW APPROVAL (IF REQUIRED). THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL WATER, SANITARY AND STORM SEWER. K. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

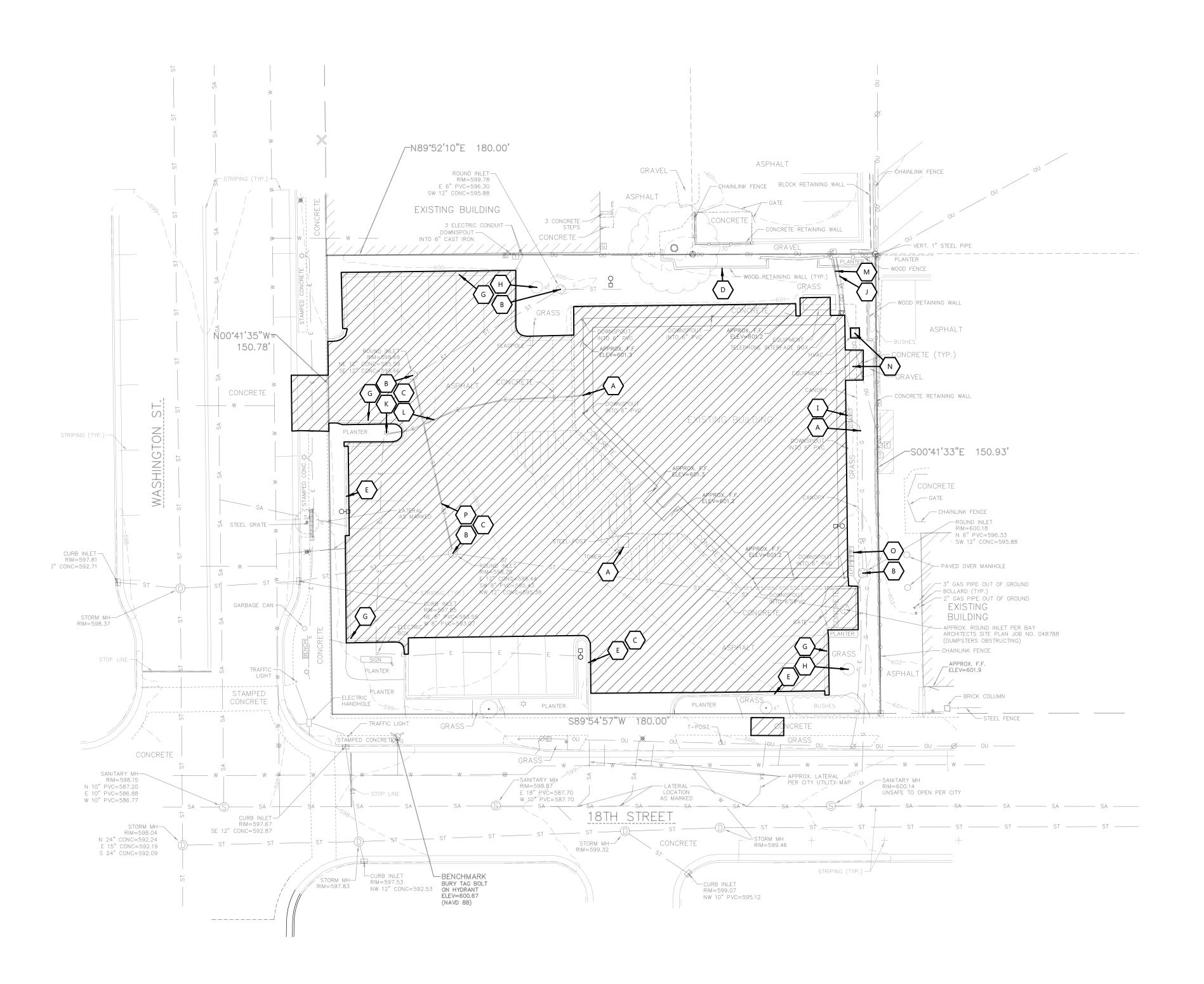
SHOP DRAWING SUBMITTALS

MATERIAL / INFORMATION

- 31.10.00 TELEVISING REPORTS OF EXISTING LATERALS STORM
- SANITARY
- 32.10.00 (A) AGGREGATE BASE & ASPHALT PAVEMENT HOT MIX ASPHALT SPECIFICATIONS
- AGGREGATE BASE
- PAVEMENT MARKINGS
- . 32.20.00-CONCRETE AND AGGREGATE BASE
- DESIGN MIX
- AGGREGATE BASE
- COMPRESSION TEST RESULTS
- DETECTABLE WARNING PLATES
- 33.10.00 SITE UTILITIES
- SANITARY & STORM MANHOLES
- SANITARY PIPING MATERIALS
- GREASE INTERCEPTOR SHOP DRAWINGS
- WATER PIPING MATERIALS
- WATER FITTINGS & APPURTENANCES
- STORM PIPING MATERIALS
- MISCELLANEOUS ITEMS
- SITE LIGHTING

CIVIL SPECIFICATIONS

Sect EXCE EXCE Always a Better Pl 100 Camelot Drive Fond du Lac, WI 5493 920-926-9800 excelengineer.com PROJECT INFORMATION	
NEW BUILDING FOR: PACIFIC BELLS LLC 1803 WASHINGTON STREET • TWO RIVERS, WI 54241	
PROFESSIONAL SEAL	
PRELIMINARY DATES DEC. 20, 2024 JAN. 22, 2025	NOT FOR CONSTRUCTION
JOB NUMBER 240331100	
SHEET NUMBER	

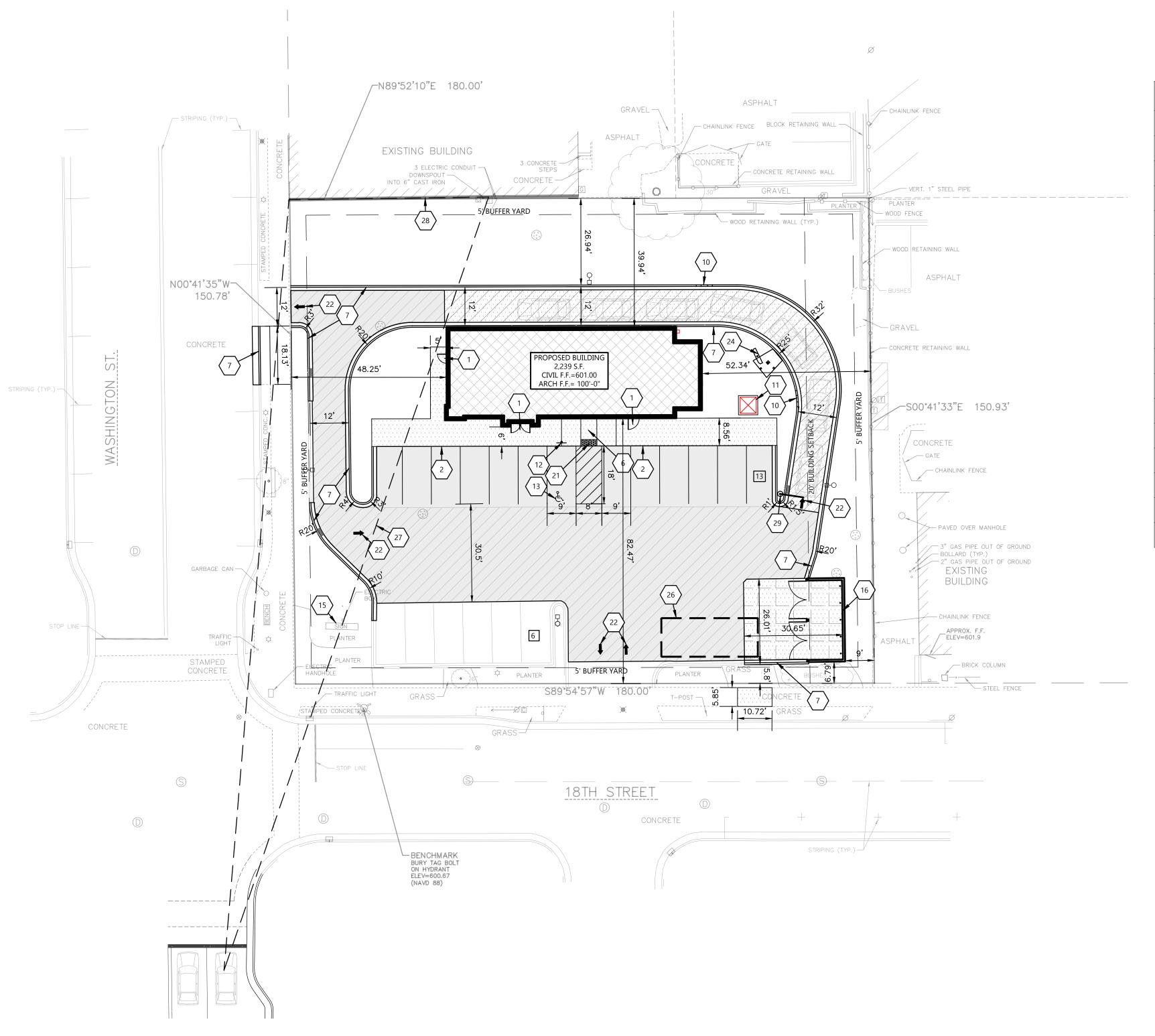


KEYNO	TES
A	REMOVE BUILDING, UTILITY SERVICES, AND ASSOCIATED SITE IMPROMENTS
B	PROTECT RIM
C	SAWCUT (AS NECESSARY) AND REMOVE PAVEMENT
	PROTECT
E	PROTECT CURB
G	REMOVE CURB. SAWCUT (AS NECESSARY)
Н	REMOVE TREE
I	REMOVE AND RELOCATE GAS METER
L	CONTRACTOR TO COORDINATE REMOVAL OF TV LINE WITH LOCAL UTILITY
K	REMOVE LIGHT POLE
	CONTRACTOR TO COORDINATE REMOVAL OF ELECTRIC LINE WITH LOCAL UTILITY
	CONTRACTOR TO COORDINATE REMOVAL OF TELEPHONE LINE WITH LOCAL UTILITY
	REMOVE MECHANICAL EQUIPMENT
\bigcirc	CONTRACTOR TO COORDINATE REMOVAL OF ELECTRICAL EQUIPMENT WITH LOCAL UTILITY
P	CONTRACTOR TO REMOVE 57' OF STORM LINE

Always a Better Plan 100 Camelot Drive Fond du Lac, WI 54935 920-926-9800 excelengineer.com PROJECT INFORMATION TO BRIDING BOR: UNA BOILDING BOR: UNA BOILDING BOR: 100 NUMBER 100 NUMBER 240331100 SHEET NUMBER C1.0	EXCEI	
IBB NUMBER 1803 MASHINGTON STREET - TWO RIVERS, MI 54241 1803 MASHINGTON STREET - TWO RIVERS, MI 54241 1804 MASHINGTON STREET - TWO RIVERS - TW	100 Camelot Drive Fond du Lac, WI 5493 920-926-9800	
I BOB NUMBER 240331100 SHEET NUMBER 240331100 SHEET NUMBER C1.0	PROJECT INFORMATION	
DEC. 20, 2024 JAN. 22, 2025	NEW BUILDING FOR: PACIFIC BELLS LLC 1803 WASHINGTON STREET • TWO RIVERS, WI 542	
<u>JOB NUMBER</u> 240331100 SHEET NUMBER С1.0	DEC. 20, 2024	NO
240331100 Sheet NUMBER		Г
sheet number		
C1.0	[
1		

SCALE: 1"= 20' 20' 0 20' 40'

CIVIL EXISTING SITE AND DEMOLITION PLAN



GENERAL NOTES:

 CONTRACTOR TO PROVIDE ENGINEER WITH FINAL JOINTING P PRIOR TO CONSTRUCTION.

	SITE INFORMATION:	
PLAN	PROPERTY AREA: 27,152 S.F. (0.63 ACRES).	1.1
	EXISTING ZONING: B-1 BUSINESS	
	PROPOSED ZONING: B-1 BUSINESS	
	PROPOSED USE: RESTAURANT WITH DRIVE-THRU	
	AREA OF SITE DISTURBANCE: 19,946 S.F. (0.45 ACRES)	
	SETBACKS: BUILDING: FRONT (WEST) = 0' SIDE (NORTH) = 0' REAR (EAST) = 20' STREET (SOUTH) = 0'	ŀ
	BUFFER YARD: STREET FRONTAGE (S/W) = 5' INTERIOR LOT LINE (N/E) = 5'	PRO.
	(MAX. HEIGHT ALLOWED: 75')	
	PARKING REQUIRED: 1 SPACE PER EACH VEHICLE CONNECTED WITH THE BUSINESS, 1 SPACE FOR OWNER OR MANAGER, 1 SPACE FOR EACH 2 EMPLOYEES ON DUTY WHEN FULLY STAFFED (5 SPACES FOR EMPLOYEES/MANAGER PLUS 13 FOR CUSTOMERS=18 REQ.)	
	PARKING PROVIDED: 19 SPACES (1 H.C. ACCESSIBLE)	
	HANDICAP STALLS REQUIRED: 1, HANDICAP STALLS PROVIDED: 1	
KEYNO	DTES	
$\left(1 \right)$	CONCRETE STOOP (SEE STRUCTURAL PLANS FOR DETAILS)	
2	RAISED WALK (SEE DETAIL)	
6	ADA CURB RAMP (SEE DETAIL)	
$\left\langle 7 \right\rangle$	18" CURB & GUTTER (SEE DETAIL)	
	CURB CUT (SEE DETAIL)	
	CONCRETE TRANSFORMER PAD BY UTILITY SUPPLIER (CONTRACTOR TO VERIFY FINAL LOCATION & DESIGN PRIOR TO CONSTRUCTION)	
12	HANDICAP SIGN PER STATE CODE (SEE DETAIL)	
$\left\langle 13\right\rangle$	HANDICAP STALL & STRIPING PER STATE CODES	

EXISTING SITE DATA

AND 18TH

EXISTING MURAL

15

16

21

(22)

〈 24 〉

(26)

(27)

(28)

29 >

REBRAND EXISITNG MONUMENT SIGN

(DETAILS, FINAL LOCATION, & APPROVAL BY SIGN VENDOR)

TRAFFIC FLOW ARROWS (TYP). COLOR TO MATCH PARKING STALL STRIPING

SIGHT VISION TRIANGLE OF EXISTING MURAL FROM INTERSECTION OF WASHINGTON

DUMPSTER ENCLOSURE (SEE ARCH PLANS FOR DETAILS)

DETECTABLE WARNING PLATE PER STATE CODE

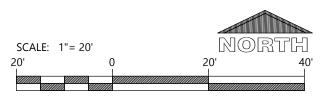
MENU BOARD AND CANOPY. DETAIL BY SUPPLIER.

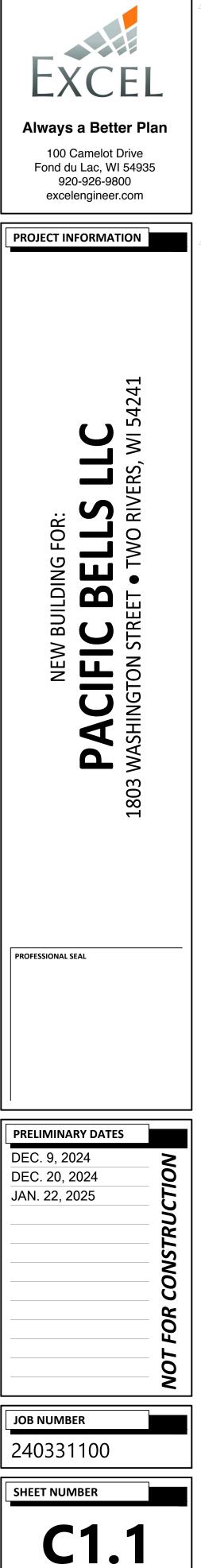
CLEARANCE BAR AND BOLLARD WITH DRIVE-THRU SIGN

12'X 30' LOADING ZONE

	AREA (AC)	AREA (SF)	RATIO
BUILDING FLOOR AREA	0.14	5,972	22.0%
PAVEMENT (ASP. & CONC.)	0.45	19,486	71.8%
TOTAL IMPERVIOUS	0.58	25,458	93.8%
LANDSCAPE/ OPEN SPACE	0.04	1,694	6.2%
PROJECT SITE	0.62	27,152	100.0%
PROPOSED SITE DA	TA AREA (AC)	AREA (SF)	RATIO
PROPOSED SITE DA BUILDING FLOOR AREA		AREA (SF) 2,239	RATIO 8.2%
	AREA (AC)		
BUILDING FLOOR AREA	AREA (AC) 0.05	2,239	8.2%
BUILDING FLOOR AREA PAVEMENT (ASP. & CONC.)	AREA (AC) 0.05 0.33	2,239 14,471	8.2% 53.3%

LEGEND:	
НАТСН	PAVEMENT SECTION
	STANDARD ASPHALT
	HEAVY DUTY ASPHALT
	SIDEWALK CONCRETE
	HEAVY DUTY CONCRETE
	DUMPSTER PAD CONCRETE

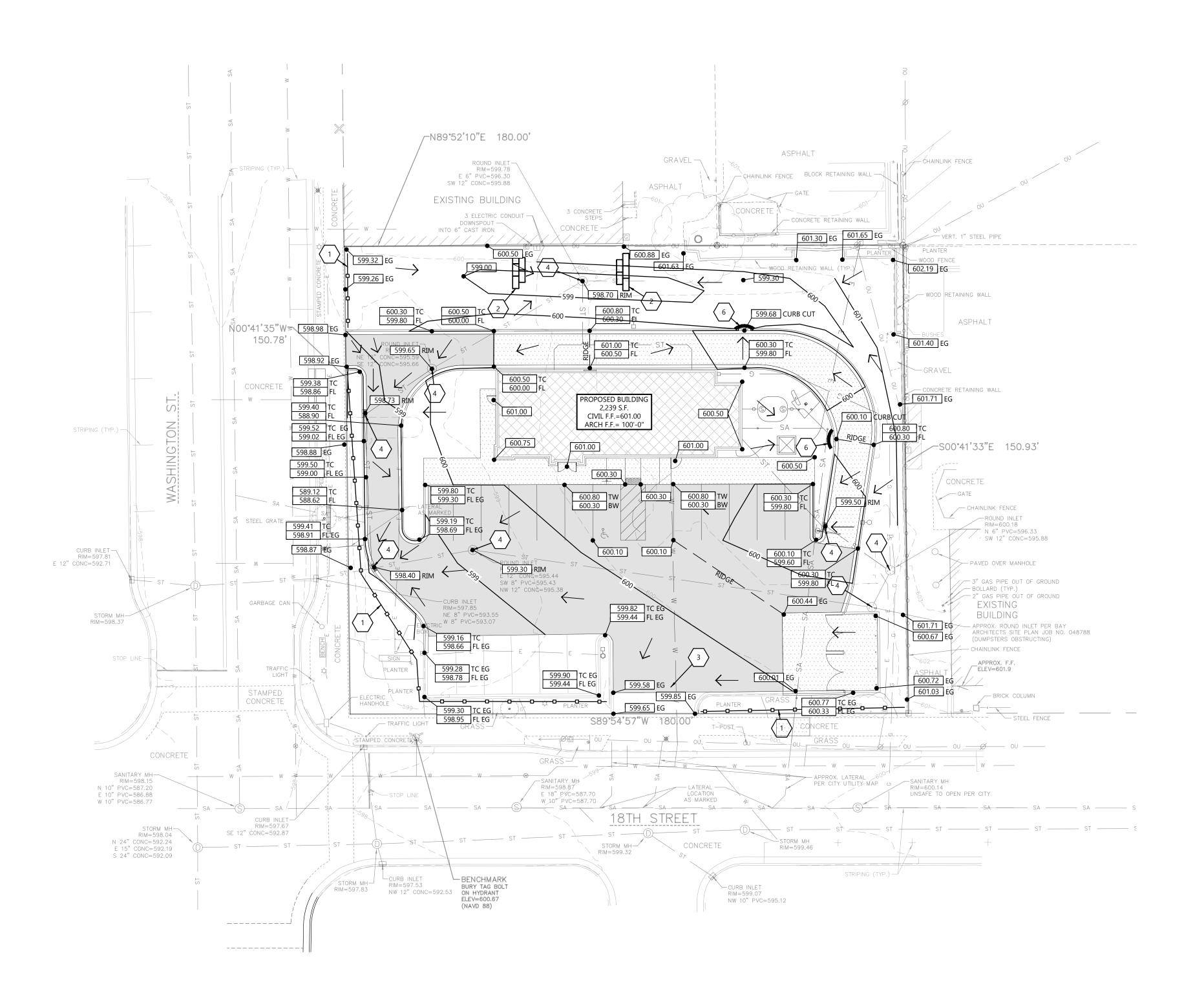




14

Section 3, ItemA.

CIVIL SITE PLAN



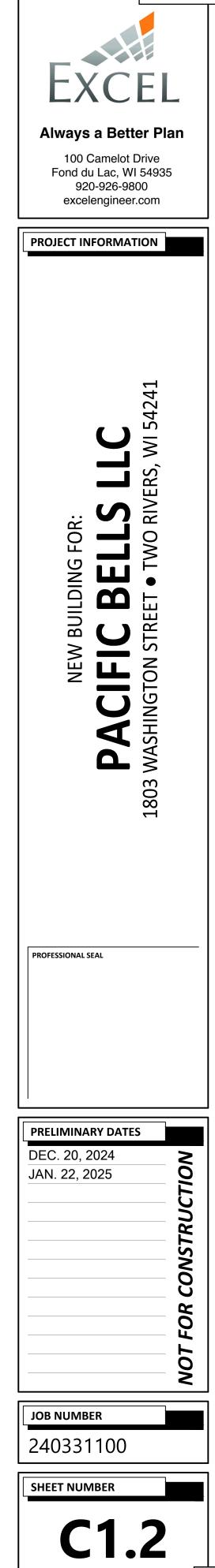
Section 3, ItemA.

GENERAL NOTES:

- HANDICAP STALL AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 1.50% IN ANY DIRECTION. HANDICAP STALL & ACCESS AISLES SHALL CONFORM TO ADA REQUIREMENTS (CURRENT EDITION)
- ALL SIDEWALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 1.50% AND RUNNING SLOPE OF 4.50% UNLESS OTHERWISE SPECIFIED
- CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ENTRANCE FOR PROPOSED IMPROVEMENTS AS REQUIRED PER CODE.
- CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AS REQUIRED PER CODE. FINAL LOCATION TBD BY CONTRACTOR.
- CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION FOR ALL CURB INLETS & CATCH BASINS ONSITE & OFFSITE IMMEDIATELY DOWNSTREAM OF THE PROJECT SITE PER LOCAL CODE.

KEYNOTES

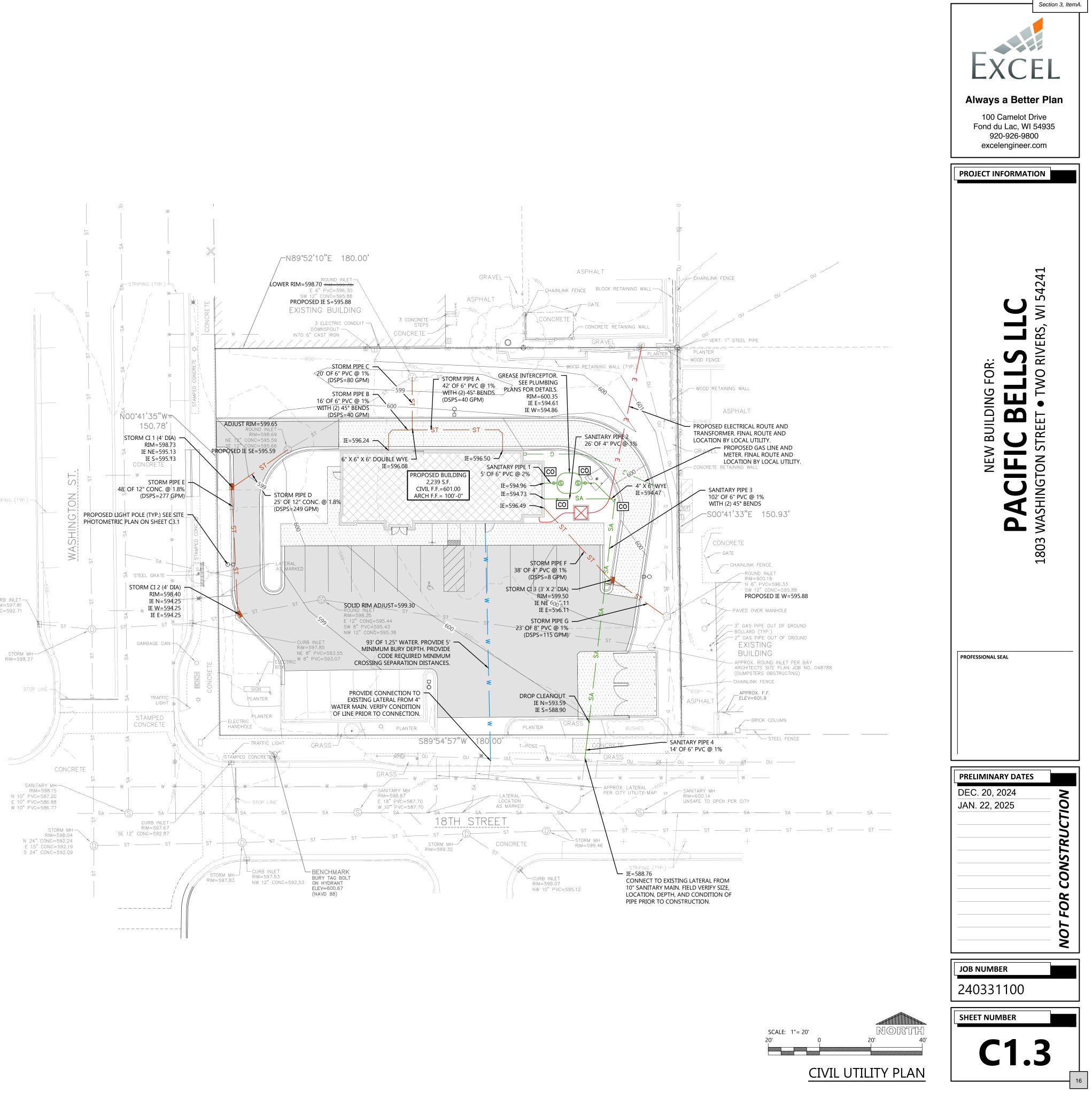
EC 1	SILT FENCE
EC 2	DITCH CHECK
EC 3	STABILIZED CONSTRUCTION ENTRANCE
EC 4	INLET PROTECTION
EC 5	SEDIMENT LOG

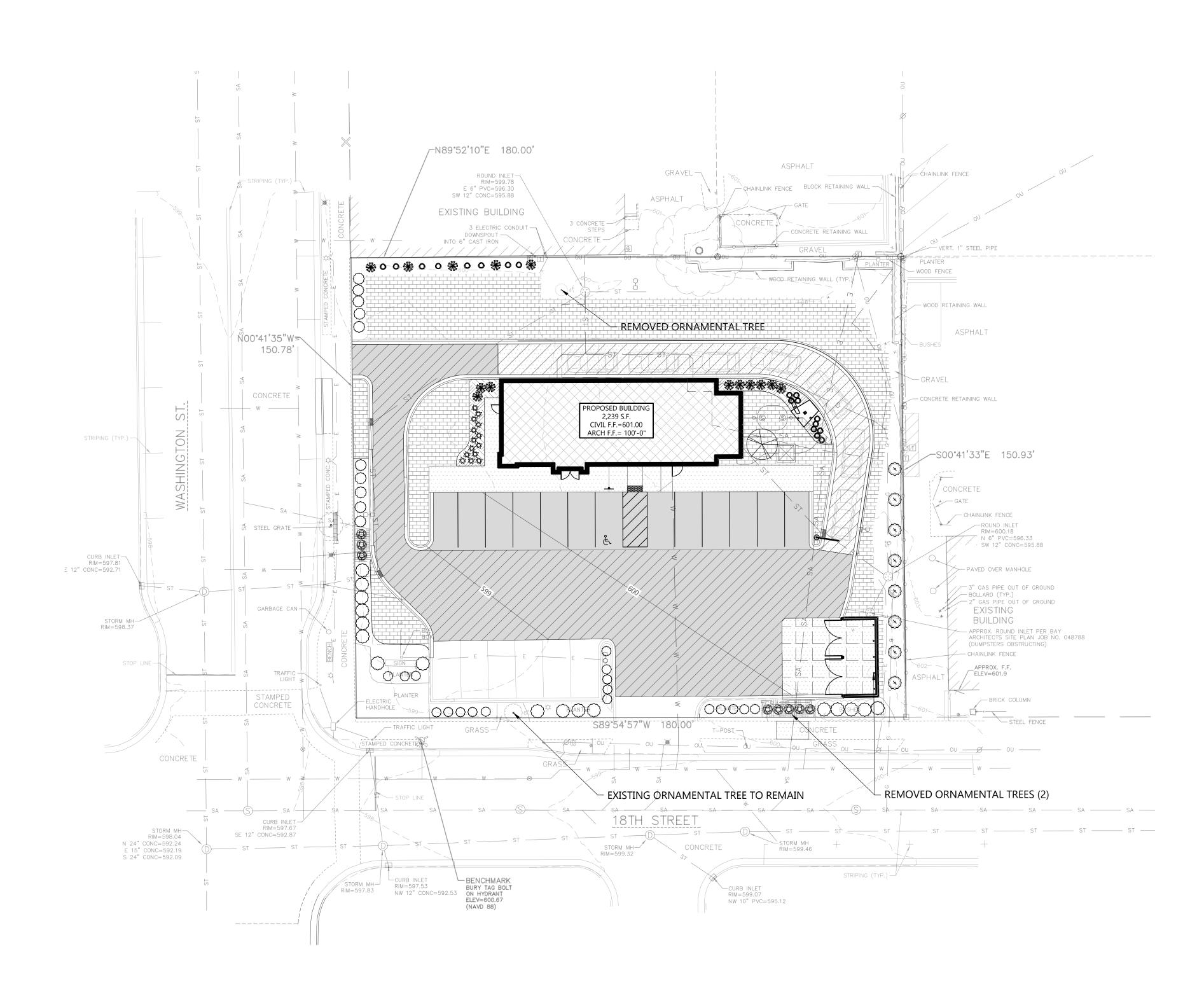


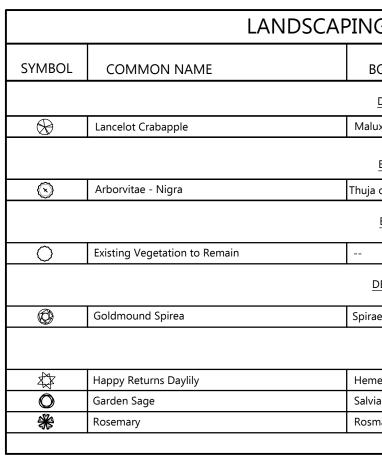
SCALE: 1"= 20' NORTH 20'

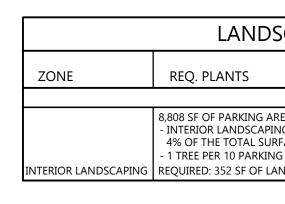
CIVIL GRADING AND EROSION CONTROL PLAN

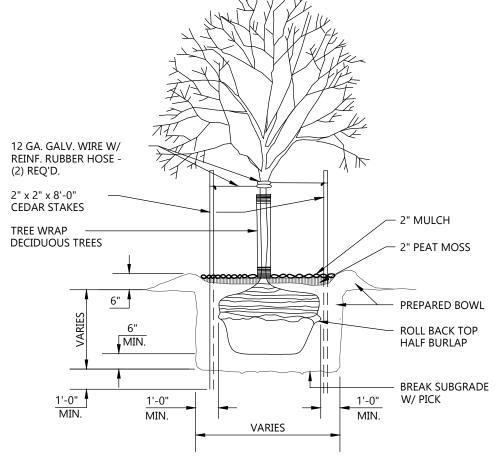
CURB INLET-RIM=597.81 E 12" CONC=592.71











TREE PLANTING DETAIL

G PLANTING SCHEDUL	.E		
BOTANICAL NAME	QUANTITY	PLANTED SIZE	ROOT
DECIDUOUS TREES			
ux 'Lanzam'	1	5 GAL.	CONT.
EVERGREEN TREES			
a occidentalis 'Nigra'	8	5 GAL.	CONT.
EXISTING SHRUBS			
	45		
DECIDUOUS SHRUBS			
aea x bumalda 'Goldmound'	8	18" HT.	CONT.
PERENNIALS			
nerocallis 'Happy Returns'	14	1 GAL.	POT
via officinalis	19	1 GAL.	POT
marinus officinalis	14	1 GAL.	POT

SCAPING CALCULATIONS							
	PLANTS PROVIDED						
REA / 19 TOTAL SPACES ING SHALL BE AT LEAST RFACE PARKING AREA IG SPACES ANDSCAPING / 2 TREES	PROVIDED: 590 SF EXISTING / 51 SF PROPOSED = 641 SF 1 EXISTING / 1 PROPOSED TREE = 2 TREES						

GENERAL NOTES:

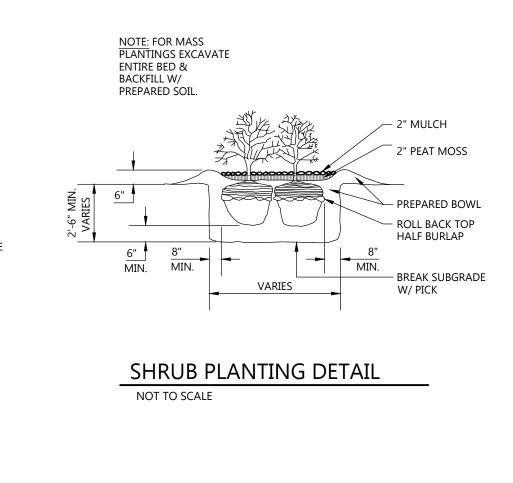
- PROTECT ALL EXISTING VEGETATION TO REMAIN SHOWN ON PLAN AND REPLACE IN KIND IF DAMAGED OR REMOVED.
- AREAS OF SOD SHOWN ALONG OUTER DRIVE AISLE ARE <u>ESTIMATED</u>
 BASED ON PROPOSED DEMOLITION AREAS. REPLACE DISTURBED
- LAWN AREA WITH SOD AS NEEDED.

 HATCH KEY:

 HATCH
 LANDSCAPE MATERIAL

 Image: Comparison of the second s

, , , , , , , , , , , , , , , , , , ,
ORGANIC MULCH (TO MATCH EXISTING)
SODDED LAWN (TO MATCH EXISTING LAWN)



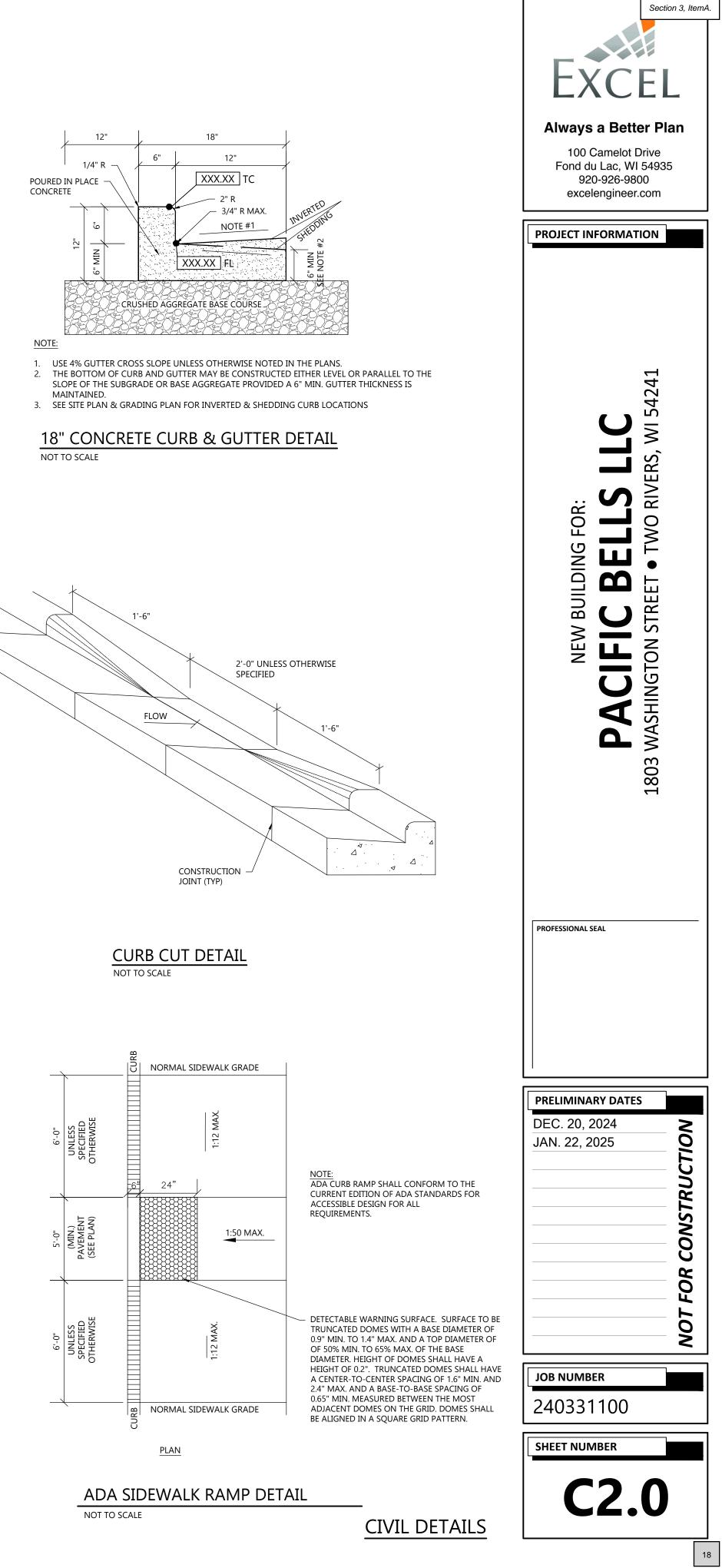
SCALE: 1"= 20' 20' 0 20' 40'

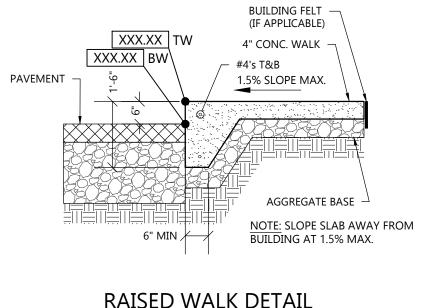
CIVIL LANDSCAPE AND RESTORATION PLAN

EXCEL EXCEL Always a Better Plan 100 Camelot Drive Fond du Lac, WI 54935 920-926-9800 excelengineer.com	
NEW BUILDING FOR: PACIFIC BELLS LLC 1803 WASHINGTON STREET • TWO RIVERS, WI 54241	
PROFESSIONAL SEAL	
PRELIMINARY DATES JAN. 22, 2025 NOLONUSOD NOLONUSOD NOLONUSOD NOLONUSOD NOLONUSOD	
JOB NUMBER 240331100	
SHEET NUMBER	
C1.4	

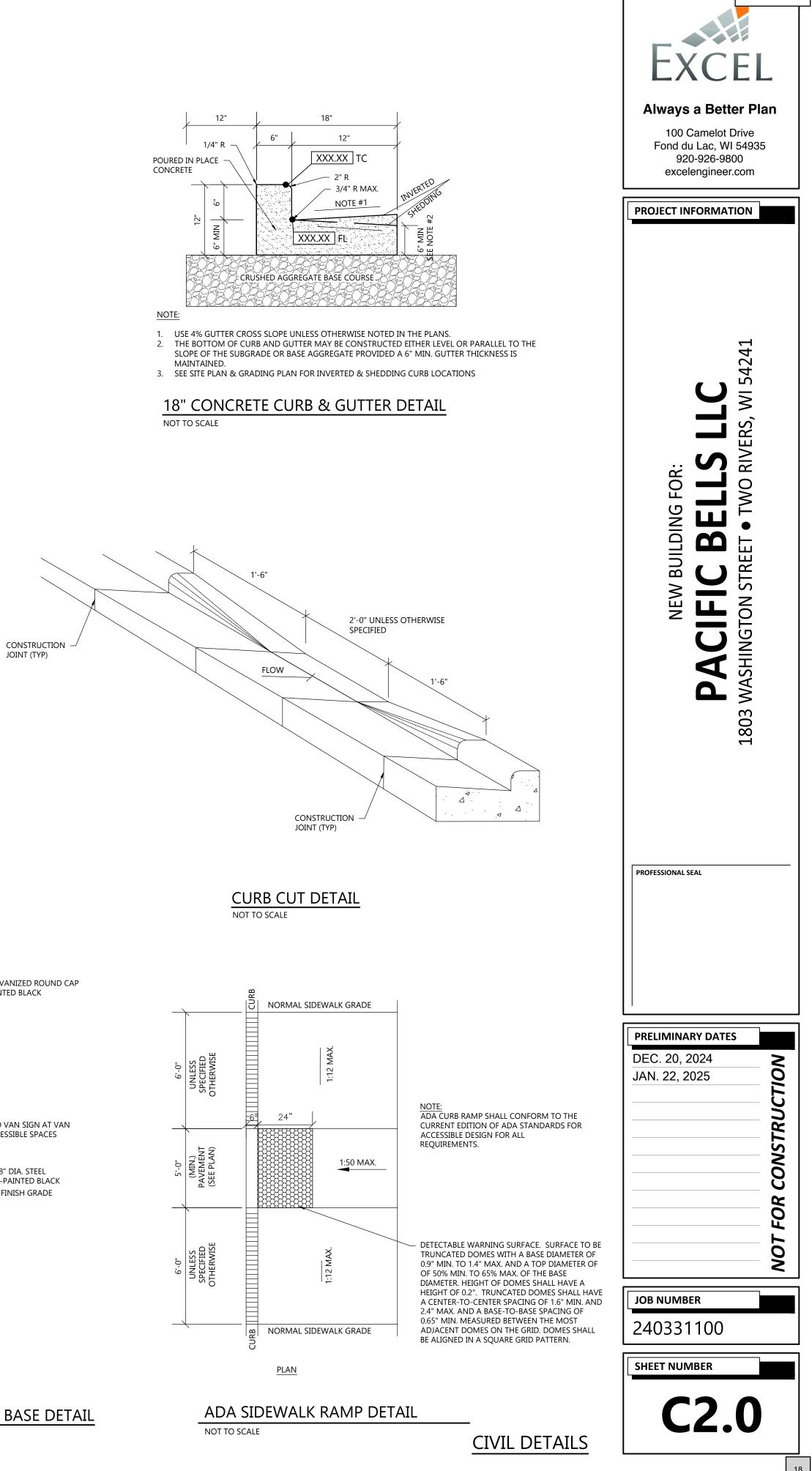
17

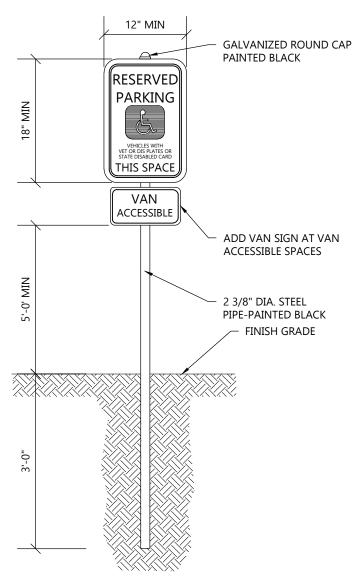
Section 3, ItemA.

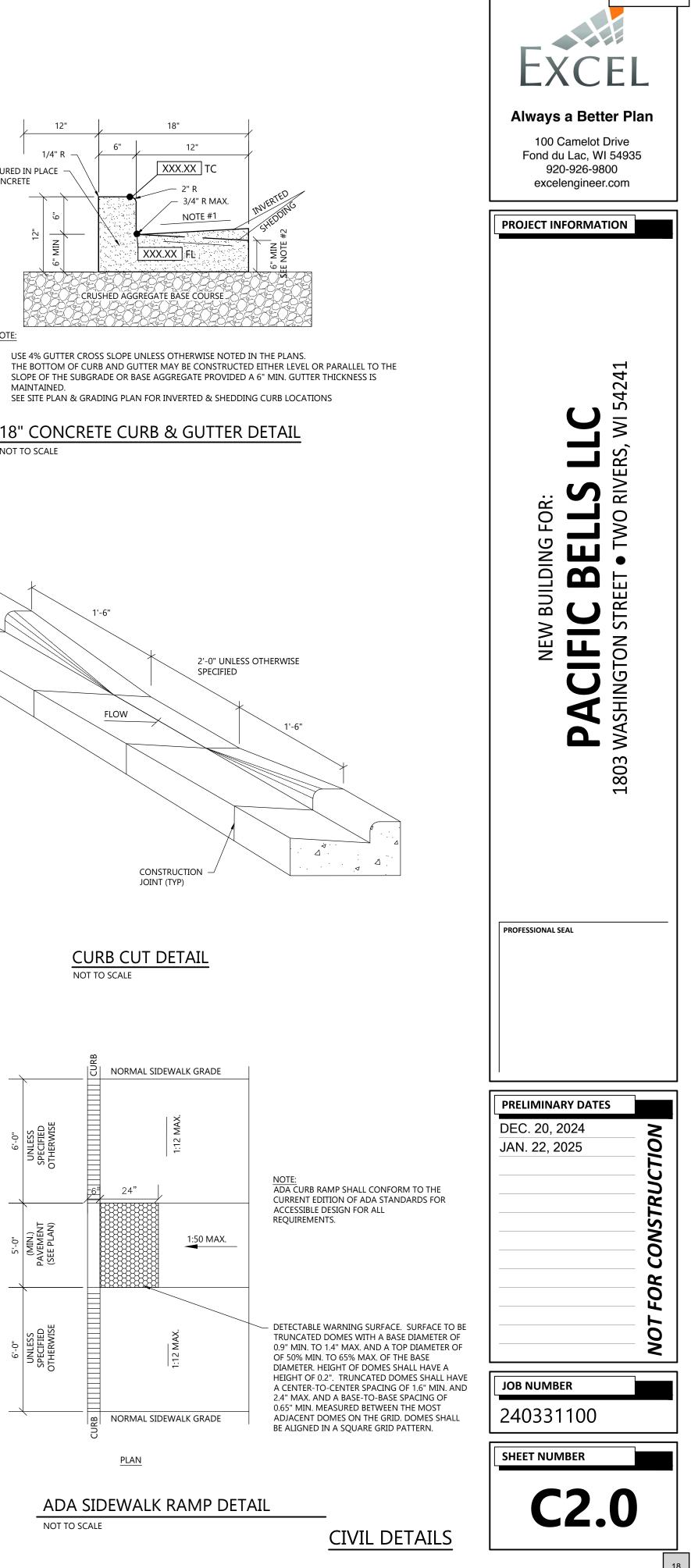






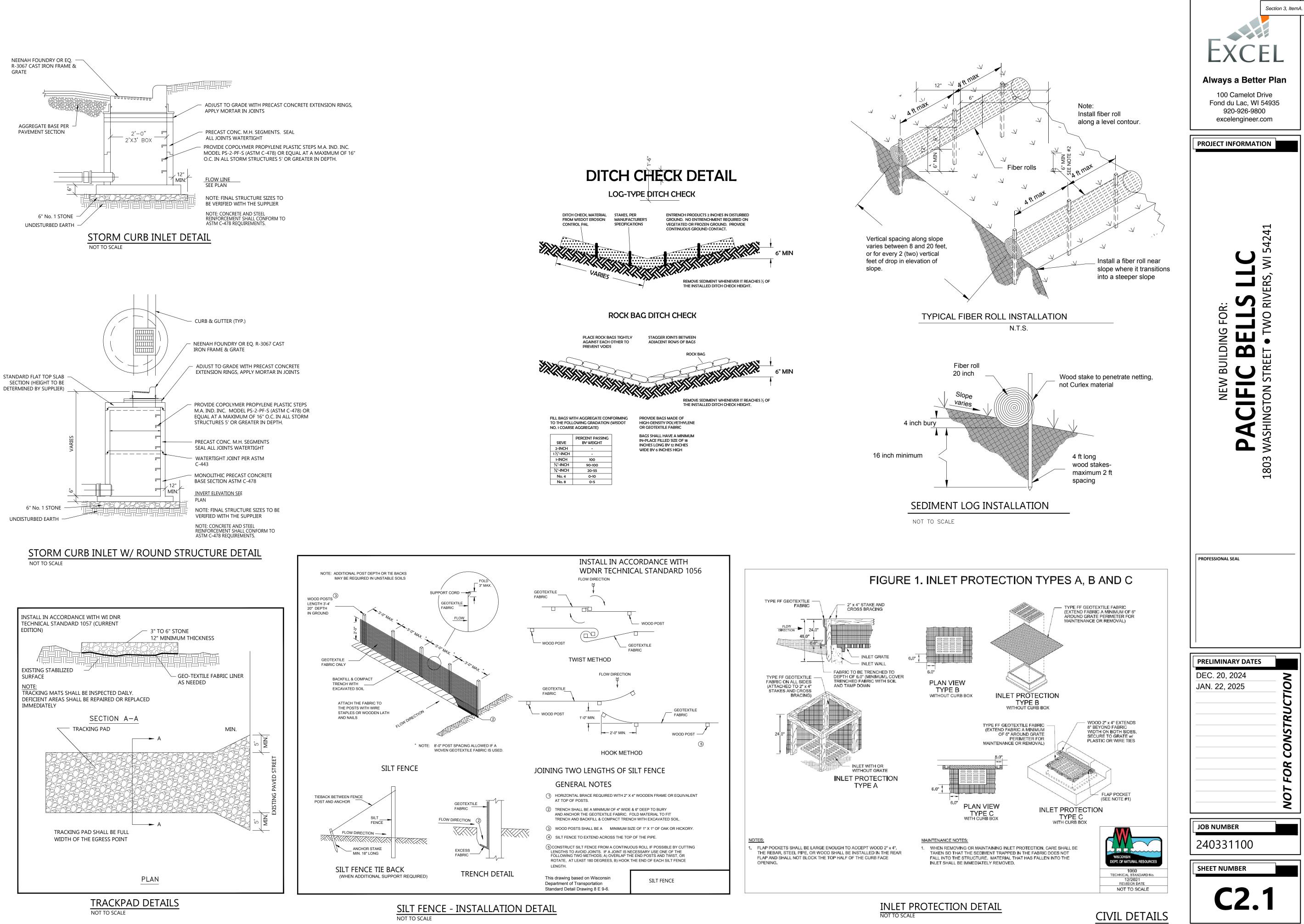




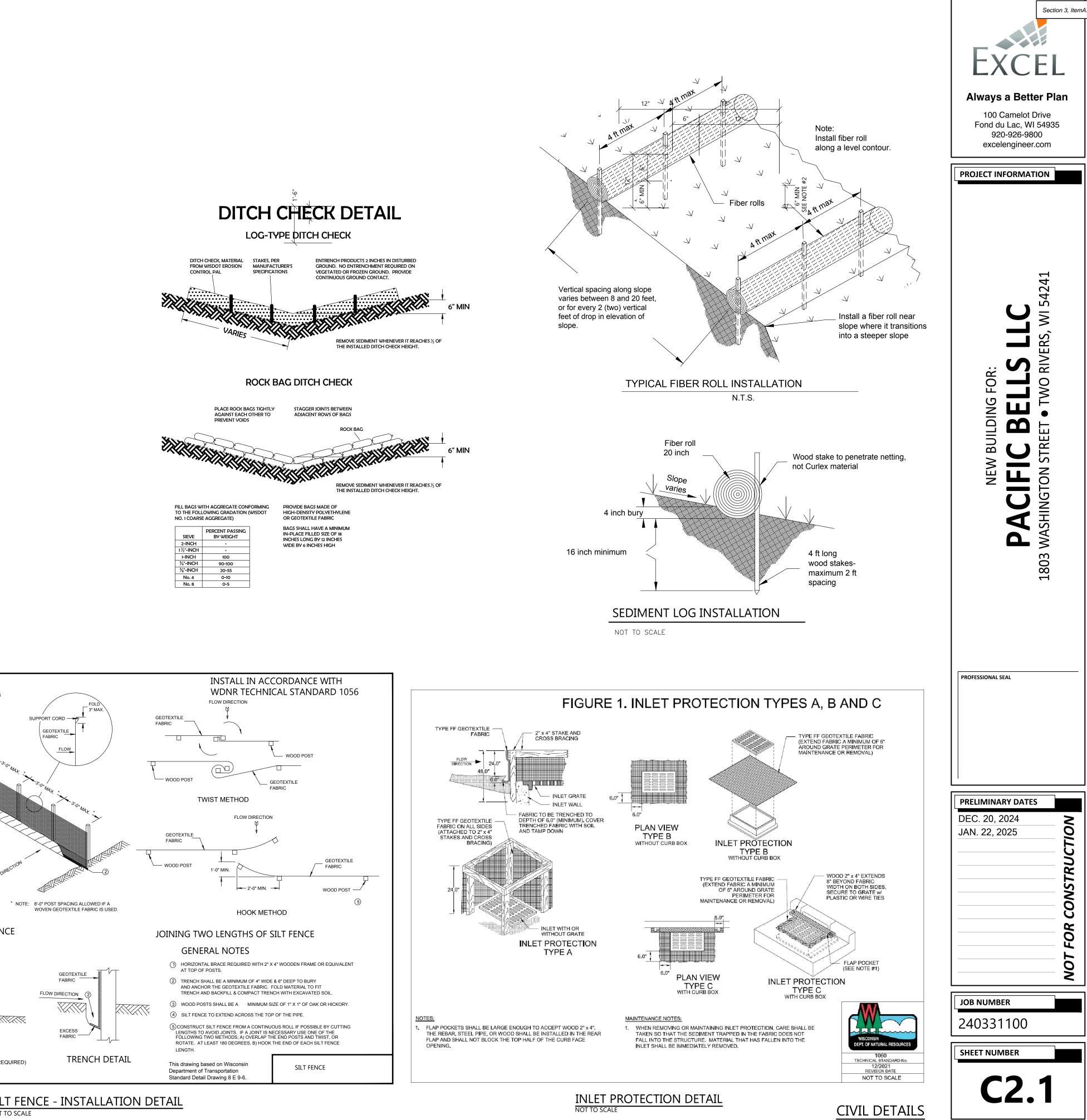


HANDICAP SIGNAGE WITHOUT CONCRETE BASE DETAIL

NOT TO SCALE









Prepared By:

Mirada Medium (MRM) Outdoor LED Area Light

🛞 💯 🏩 💻 🥮 🏨 IP66 IK08

OVER	VIEW	
Lumen Package	7,000 - 48,000	
Wattage Range	48 - 401	QUICK LINKS
Efficacy Range (LPW)	117 - 160	
Weight lbs(kg)	30 (13.6)	Ordering Guide

FEATURES & SPECIFICATIONS

- Construction
- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath. Designed to mount to square or round available.

Electrical

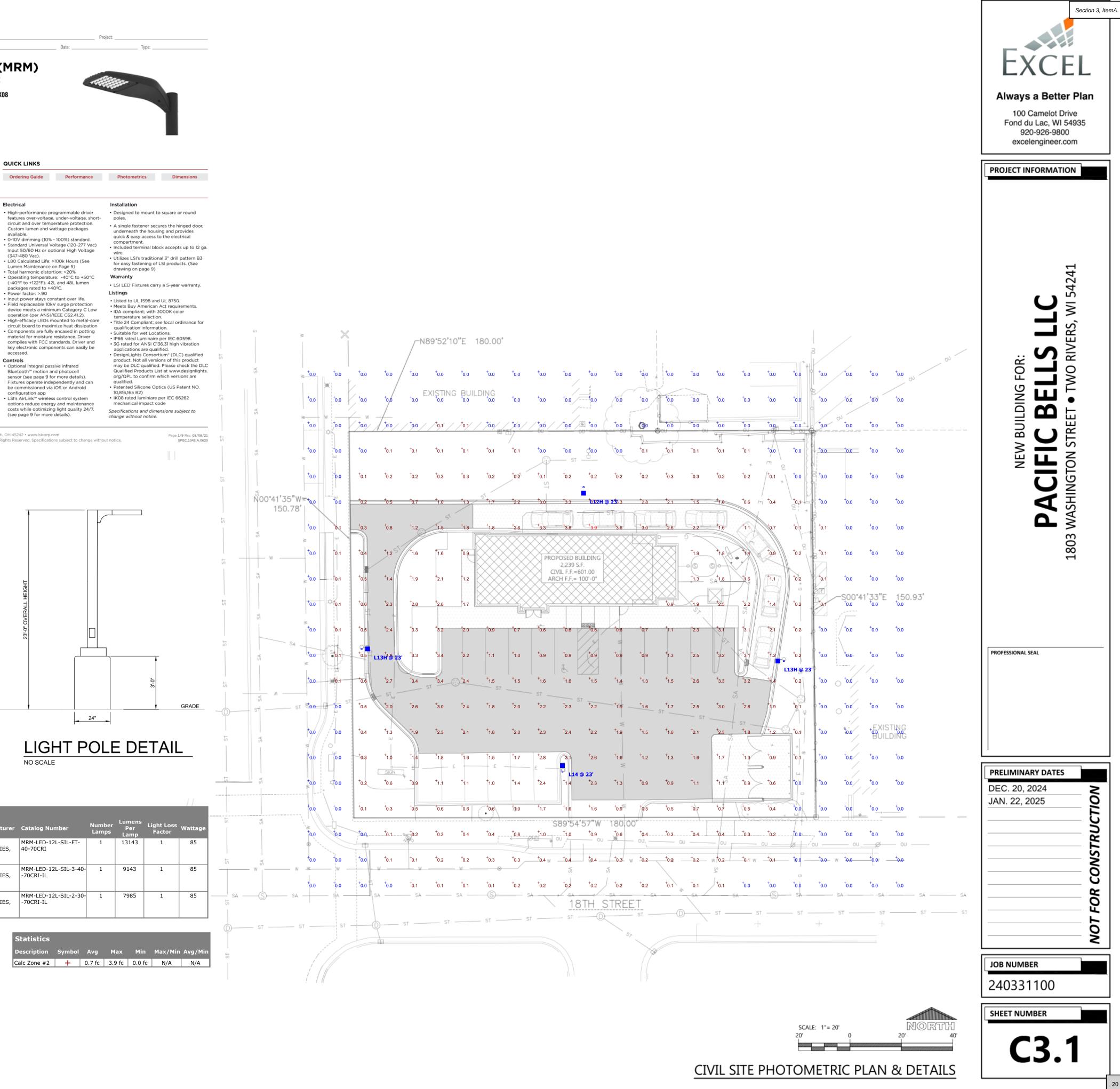
accessed.

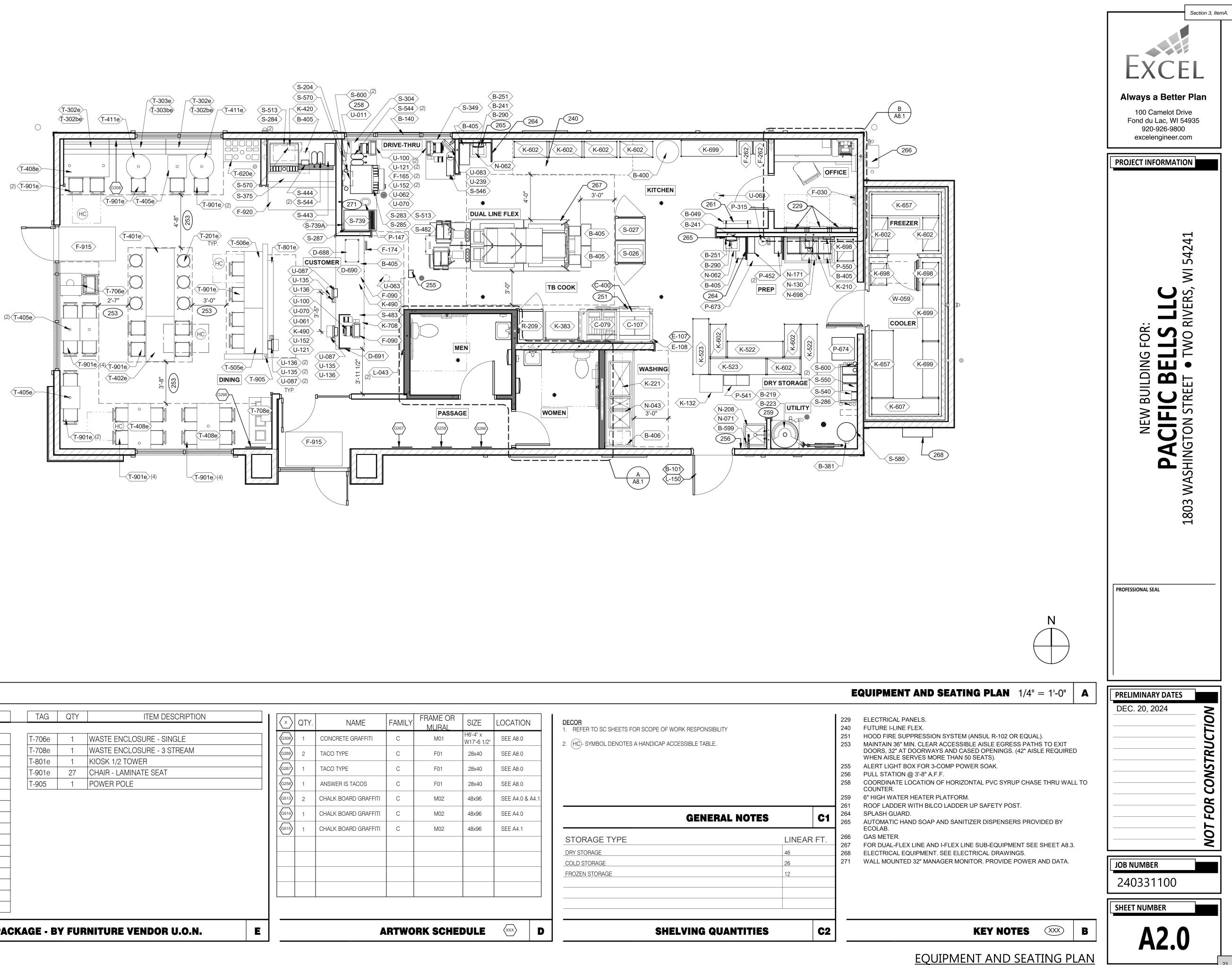
- poles. Fixtures are finished with LSI's DuraGrip' polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 37 lbs in carton. Optical System
- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, 5W, FT, FTA and AM. Silicone optical material does not yellow or crack with age and provides a typical light
- transmittance of 93%. Zero uplight.
 Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also Controls Available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 70.
 Integral louver (IL) and house-side shield (IH) options available for improved backlight control without sacrificing street
- side performance. See page 3 for more details.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com (513) 372-3200 • ©2020 LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice.

NO SCALE

Schedule				
Symbol	Label	Quantity	Manufacturer	Catalog
	L14	1	LSI INDUSTRIES, INC.	MRM-LED 40-70CR
	L13H	2	LSI INDUSTRIES, INC.	MRM-LED -70CRI-I
	L12H	1	LSI INDUSTRIES, INC.	MRM-LED -70CRI-I

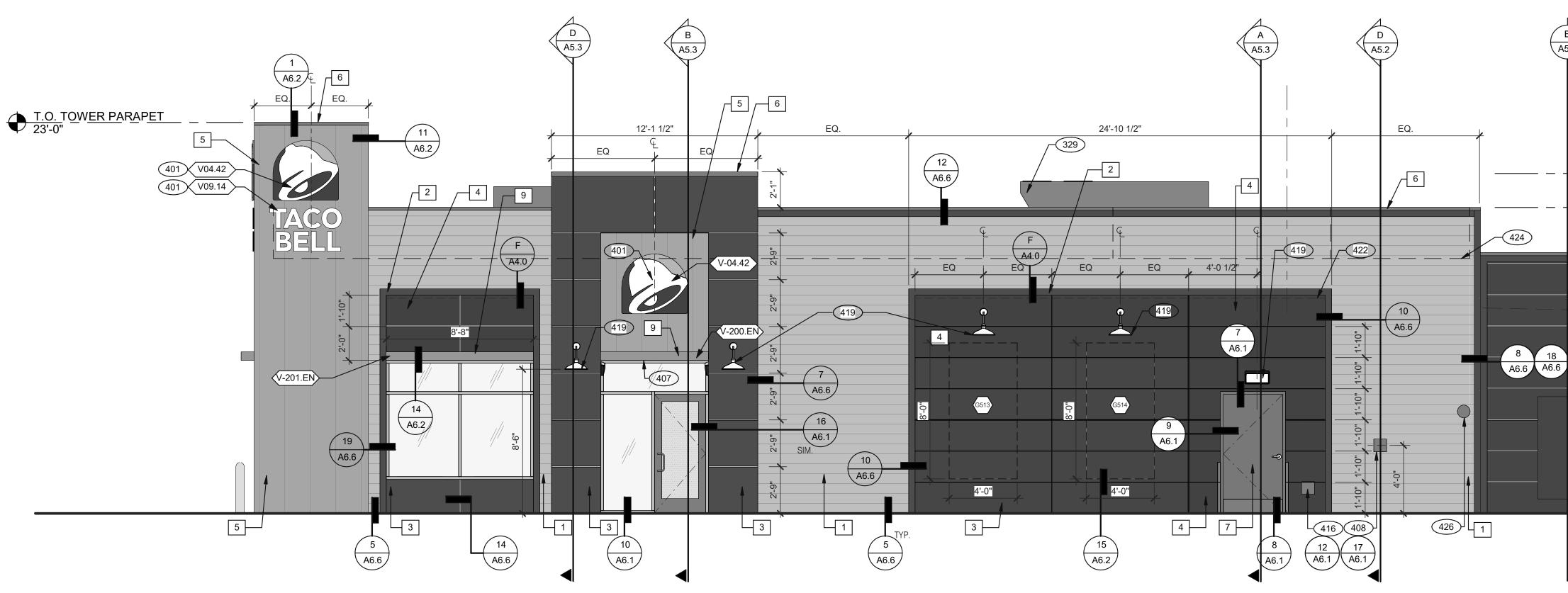


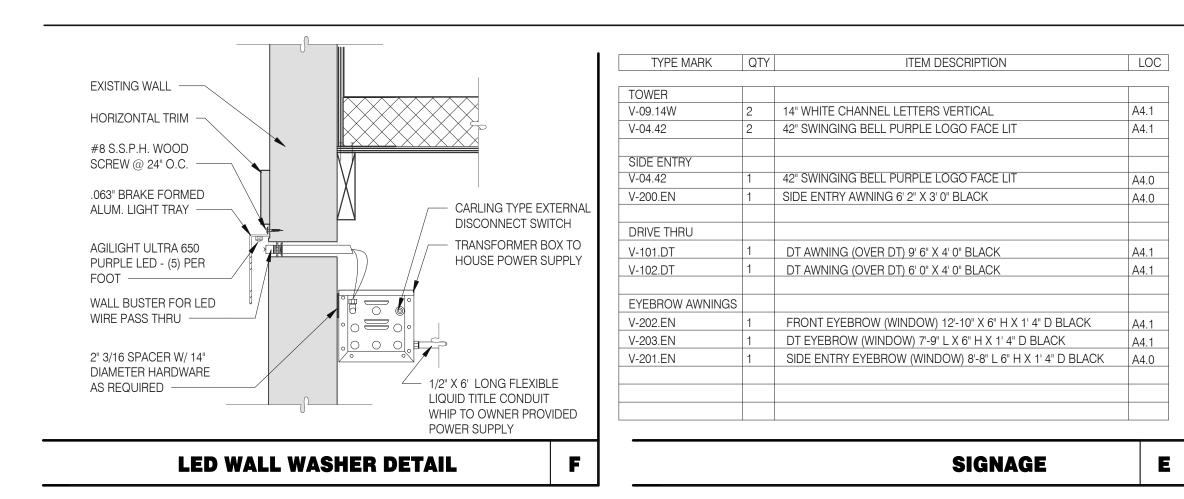


TAG	QTY	ITEM DESCRIPTION	TAG	QTY	ITEM DESCRIPTION	[< x		TY. NAME	FAMILY	, FRAME OR	SIZE	LOCATION
	4		T 700-			(G308	/				H6'-4" x	
)-688		COUNTER MOUNT MOBILE SHELVING	T-706e		WASTE ENCLOSURE - SINGLE			CONCRETE GRAFFITI	С	M01	W17'-6 1/2"	SEE A8.0
)-690	1	SERVICE COUNTER	T-708e	1	WASTE ENCLOSURE - 3 STREAM	(G266	6) 2	TACO TYPE	С	F01	28x40	SEE A8.0
)-700	11	28.5" H CORE DRILL TABLE BASE	T-801e	1	KIOSK 1/2 TOWER	(G267						
-201e	6	BARREL BARSTOOL - 29 PURPLE WOOD SEAT	T-901e	27	CHAIR - LAMINATE SEAT		/	TACO TYPE	С	F01	28x40	SEE A8.0
-302be	2	BENCH BACK REST - 48"	T-905	1	POWER POLE	G258	₿ 1	ANSWER IS TACOS	С	F01	28x40	SEE A8.0
-302e	2	BENCH SEAT - 48"				G513		CHALK BOARD GRAFFITI	С	M02	48x96	SEE A4.0 & A
-303be	1	BENCH BACK REST - 60"				(G514						
-303e	1	BENCH SEAT - 60"						CHALK BOARD GRAFFITI	С	M02	48x96	SEE A4.0
-401e	1	HUB TABLE - 72" - HIGH TOP				G515	∮ 1	CHALK BOARD GRAFFITI	С	M02	48x96	SEE A4.1
-402e	1	HUB TABLE - 48" - ADA										
-405e	4	LAMINATE TABLE - 24 X 20 X 30 - 2 TOP					_					
-408e	3	LAMINATE TABLE ADA - 24 X 48 X 30 - 4 TOP										
-411e	2	SS TABLE - 24 DIA X 30 - 2 TOP										
-505e	1	COUNTER TOP - 48" X 20" X 30"										
-506e	1	COUNTER TOP - 60" X 20" X 30"										
-620e	1	CONDIMENT COUNTER - RECTANGLE										

FURNITURE PACKAGE - BY FURNITURE VENDOR U.O.N.

	GENERAL NOTES		C1
STORAGE TYPE		LINEAR	FT.
DRY STORAGE		46	
COLD STORAGE		26	
FROZEN STORAGE		12	
	SHELVING QUANTITIES		C2





SYMBOL	ITEM/MATERIAL	MANUFACTURER	MATERIAL SPEC	ALT. MANUFACTURER SPEC 'A'	ALT. MATERIAL SPEC 'A'	ALT. MANUFACTURER SPEC 'B'	ALT. MATERIAL SPEC 'B'	COLOR	CONTACT INFO
1	SIDING - HORIZONTAL APPLICATION	JAMES HARDIE	ARTISAN V-GROOVE 144"L X 8.25"W; 7" EXPOSURE COMES PRIMED FOR PAINT	WESTLAKE ROYAL BUILDING PRODUCTS	TruExterior V-RUSTIC 192"L x 7.5"W; 7" EXPOSURE; PRIMED FOR PAINT	NICHIHA	TruExterior V-RUSTIC 192"L x 7.5"W; 7" EXPOSURE; PRIMED FOR PAINT	WORLDLY GRAY (SW7043), SEMI-GLOSS	
2	BUILDING TRIM	JAMES HARDIE	HARDIE TRIM 5/4 SMOOTH; 1"x5.5" PRIMED FOR PAINT	WESTLAKE ROYAL BUILDING PRODUCTS	TruExterior TRIM 5/4 x 6; 1" x 5.5" PRIMED FOR PAINT	NICHIHA	TruExterior TRIM 5/4 x 6; 1" x 5.5" PRIMED FOR PAINT	CYBERSPACE (SW7076), SEMI-GLOSS	REFER TO EXTERIOR
3	REVEAL PANEL **CONSULTANT TO REVISE REVEAL BREAKS FOR USING NICHIHA ILLUMINATION PANEL	JAMES HARDIE	HARDIE PANEL VERTICAL SIDING W/ ALUM TRIM FROM FRY REGLET AND/OR TAMLYN	N/A	USE HARDIE PANEL	NICHIHA	USE HARDIE PANEL	CYBERSPACE (SW7076), SEMI-GLOSS	FINISH VENDOR CONTACTS ON A7.2 FOR TACO BELL
4	REVEAL PANEL **CONSULTANT TO REVISE REVEAL BREAKS FOR USING NICHIHA ILLUMINATION PANEL	JAMES HARDIE	HARDIE PANEL VERTICAL SIDING W/ ALUM TRIM FROM FRY REGLET AND/OR TAMLYN	N/A	USE HARDIE PANEL	NICHIHA	USE HARDIE PANEL	SW PURPLE (TB2603C), SEMI-GLOSS	ONATIONAL ACCOUNT REPRESENTATIVES (DO NOT CALL
5	DRIVE THRU CORNER TOWER & ENTRY PORTAL RECESS	WESTERN STATES	T-GROOVE 24GA PAINTED 18" PANEL					WEATHERED RUSTIC	MANUFACTURER 1-800 OR GENERAL CONTACT
6	METAL PARAPET CAP		24GA GALVANIZED					CYBERSPACE (SW7076) KYNAR 500 COATING	NUMBERS AS YOU WILL NOT RECEIVE
7	HOLLOW METAL DOOR							SW PURPLE (TB2603C), SEMI-GLOSS	CORRECT INFORMATION TO BRAND SPECIFIED
8	NOT USED								PRODUCTS.
9	AWNINGS	BRAND APPROVED SIGNAGE VENDOR						BLACK (BY THE SIGNAGE VENDOR)	

*MUST SELECT ONE COMPLETE OPTION FOR #1 THROUGH #4 AND INCLUDE LETTER IN SYMBOL TAG IF CHOOSING 'A' OR 'B'

MISCELLANEOUS

A. SEE SHEET A1.1 "WINDOW TYPES" FOR WINDOW ELEVATIONS.

SEALERS (REFER TO SPECS)

A. SEALANT AT ALL WALL AND ROOF PENETRATIONS.
B. SEALANT AT ALL WINDOW AND DOOR FRAMES AND JAMB. DO NOT SEAL SILL @ WINDOWS.
C. APPLY NEOPRENE GASKET (CONT.) BETWEEN BUILDING AND CANOPY.

CRITICAL DIMENSIONS

A. REQUIRED CLEAR OPENING WIDTH TO ENSURE COORDINATION WITH STANDARD SIGNAGE/BUILDING ELEMENTS DIMENSIONS.

NOTE: NO EXTERIOR SIGNS ARE WITHIN THE SCOPE OF WORK COVERED BY THE BUILDING PERMIT APPLICATION. THE FRANCHISEE WILL COORDINATE THE SIGN INSTALLATION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED BLOCKING, PROPER DIMENSIONS, ELECTRICAL AND MUST PROVIDE ACCESS TO SITE AND BUILDING FOR FRANCHISEE'S SIGN INSTALLER.

GENERAL NOTES

С

X	NAME	FAMILY	FRAME OR MURAL	SIZE	LOCATIO
(G513)	CHALK BOARD GRAFFITI	С	M02	48x96	A4.0
G514	CHALK BOARD GRAFFITI	С	M02	48x96	A4.0
G515	CHALK BOARD GRAFFITI	С	M02	48x96	A4.1

ALUMINUM TRIM PROFILES [ALTERNATE SOURCE]			
DESCRIPTION	ITEM ID - MANUFACTURER		
SURROUND J CHANNEL TRIM	T2 - FRY REGLET JMS - TAMLYN		
URROUND VERTICAL TRIM	V2 - FRY REGLET W516RV - TAMLYN		
/ENT SCREEN	VST38 - TAMLYN		
SURROUND HORIZONTAL TRIM	W2 - TAMLYN		
SURROUND DRAINAGE FLASHING	XWF - TAMLYN		
SURROUND OUTSIDE CORNER	OC9 - FRY REGLET XOCR516 - TAMLYN		
SURROUND INSIDE CORNER TRIM	IC1 or IC21 - FRY REGLET XIC516 - TAMLYN		

EXTERIOR FINISH SCHEDULE

