



## GENERAL NOTES

- EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES (INCLUDING THOSE LABELED PER RECORD DATA) PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS. INFORM ENGINEER OF ANY CONFLICTS DETRIMENTAL TO THE DESIGN INTENT.
- 48 HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: THE WISCONSIN UTILITY PROTECTION SERVICES, AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF WISCONSIN DIG-RITE UNDERGROUND PROTECTION, INC.
- THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND OWNER'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
- ANY WORK PERFORMED IN THE LOCAL OR STATE RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL OR STATE REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE RIGHT OF WAYS.
- THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE WISCONSIN DEQ FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE WITH WRITTEN REPORTS. CONTRACTOR WILL OBTAIN NPDES PERMIT.
- CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY CITY OF SHEBOYGAN / SHEBOYGAN COUNTY AND THE WISCONSIN DEQ.
- ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH SPECIFICATIONS. IF NO SPECIFICATIONS ARE SUPPLIED, USE STATE OF WISCONSIN SPECIFICATIONS ITEM.
- ITEM NUMBERS REFER TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF CITY OF SHEBOYGAN / SHEBOYGAN COUNTY. WHEN IN CONFLICT, THE COUNTY REQUIREMENTS SHALL PREVAIL.
- ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
- THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
- BEFORE INSTALLATION OF STORM OR SANITARY SEWER, OR OTHER UTILITY, THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT HE IS NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
- ADJUST/RECONSTRUCT ALL EXISTING CASTINGS, CLEANOUTS, ETC. WITHIN PROJECT AREA TO GRADE AS REQUIRED.
- CONTRACTOR TO REMOVE & REPLACE PAVEMENT AS SPECIFIED.
- ALL STANDARD PARKING PLACES ARE 9' BY 18'.
- SITE SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE WISDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

## ABBREVIATIONS

AC	ACRES
ADA	AMERICANS WITH DISABILITIES ACT
ADAAG	AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
AI, A.I.	AREA INLET
ATG	ADJUST TO GRADE
BC	BASE OF CURB AT FLOWLINE
BFP	BACK FLOW PREVENTION
BLDG	BUILDING
C.O.	CLEANOUT
CI, C.I.	CURB INLET
CMR	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
COMM	U/G COMMUNICATION LINE
CONC	CONCRETE
CY	CUBIC YARD
DI	DUCTILE IRON
DIA	DIAMETER
DB	DRAIN BASIN
DS	DOWNSPOUT
ELEV	ELEVATION
EX	EXISTING
E.O.P.	END OF PIPE
FEMA	FEDERAL EMERGENCY MANAGEMENT ADMINISTRATION
FF	FINISHED FLOOR ELEVATION
FL	FLOW LINE
FND	FOUNDATION
G	U/G GAS LINE
GI, G.I.	GRADED INLET
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HGT	HEIGHT
IMP	IMPERVIOUS
INV	INVERT
IRRIG	U/G IRRIGATION LINE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N.T.S; NTS	NOT TO SCALE
OH	OVERALL HEIGHT
PP	POLY PROPYLENE
PVC	POLY VINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS
RD	ROOF DRAIN
SAN; SS	SANITARY SEWER
SF	SQUARE FEET
ST; STM	STORM
T/C	U/G PHONE AND/OR DATA LINE
TBR	TO BE REMOVED
TBR&R	TO BE REMOVED & REPLACED
TC	TOP OF CURB
TD	TRENCH DRAIN
TS	TOP OF SURFACE
TW	TOP OF WALL ELEVATION
TYP	TYPICAL
UG; U/G	UNDERGROUND
U-G-E	U/G ELECTRIC LINE
USGS	UNITED STATES GEOLOGICAL SURVEY
UST	U/G PETROLEUM STORAGE TANK
W	WATER
XFRMR	TRANSFORMER



PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.

## DEMOLITION NOTES

- ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS AND FOOTINGS, CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE BACKFILLED WITH SATISFACTORY MATERIALS AND COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATION.
- CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD.
- NO TREES SHALL BE REMOVED, NOR VEGETATION DISTURBED BEYOND THE LIMITS OF CONSTRUCTION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS - OR - IN ACCORDANCE WITH THE DETAILED DRAWINGS. DO NOT OPERATE OR STORE EQUIPMENT, NOR HANDLE OR STORE MATERIALS WITHIN THE DRIP LINES OF THE TREES SHOWN TO REMAIN.
- PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
- ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OFFSITE IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO THE APPROPRIATE UTILITY COMPANY STANDARDS AND AT THE CONTRACTOR'S EXPENSE.
- ALL UTILITY DISCONNECTION, REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY / AGENCY. UTILITY CONTACTS ARE LISTED ON THE COVER SHEET.
- THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR OBTAINS PRIOR WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.
- EROSION & SEDIMENT CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE PROPERLY INSTALLED AND FUNCTION PROPERLY PRIOR TO INITIALIZATION OF DEMOLITION ACTIVITIES.
- ASBESTOS OR HAZARDOUS MATERIALS ARE NOT EXPECTED, IF FOUND ON SITE, SUCH MATERIALS SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
- CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL AND OSHA REGULATIONS DURING ALL DEMOLITION ACTIVITIES.
- CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND FEATURES TO REMAIN. ANY ITEMS TO REMAIN THAT HAVE BEEN DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC.. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- PROVIDE NEAT, STRAIGHT, FULL DEPTH, SAW CUTS OF EXISTING PAVEMENT WHERE INDICATED ALONG LIMITS OF PAVEMENT DEMOLITION.
- ALL UTILITY AND STRUCTURE REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED AND PROPERLY DOCUMENTED BY A CERTIFIED PROFESSIONAL, WHEN APPLICABLE. WITH THE APPROPRIATE UTILITY COMPANY, MUNICIPALITY AND/OR AGENCY. DEMOLITION OF REGULATED ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO WELLS, ASBESTOS, UNDER GROUND STORAGE TANKS, SEPTIC TANKS AND ELECTRIC TRANSFORMERS. DEMOLITION CONTRACTOR SHALL REFER TO ANY ENVIRONMENTAL STUDIES FOR DEMOLITION RECOMMENDATIONS AND GUIDANCE. AVAILABLE ENVIRONMENTAL STUDIES MAY INCLUDE, BUT ARE NOT LIMITED TO PHASE I ESA, PHASE II, WETLAND AND STREAM DELINEATION AND ASBESTOS SURVEY. ALL APPLICABLE ENVIRONMENTAL STUDIES SHALL BE MADE AVAILABLE UPON REQUEST.
- ALL PAVEMENT, BASE COURSES, SIDEWALKS, CURBS, BUILDINGS, FOUNDATIONS, ETC., WITHIN THE AREA TO BE DEMOLISHED SHALL BE REMOVED TO FULL DEPTH. EXISTING BASE COURSE MATERIALS MAY BE WORKED INTO THE NEW PAVEMENT OR BUILDING SUBGRADE IF THE GRADATION, CONSISTENCY, COMPACTION, SUBGRADE CONDITION, ETC., ARE IN ACCORDANCE WITH THE SPECIFICATIONS AND RECOMMENDATIONS OF THE REPORT OF GEOTECHNICAL INVESTIGATION. BASE COURSE MATERIALS SHALL NOT BE WORKED INTO THE SUBGRADE AREAS TO RECEIVE LANDSCAPING.
- THE CONTRACTOR SHALL USE SUITABLE METHODS TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION ACTIVITIES.

## LAYOUT NOTES

- THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. RELOCATE EXISTING UTILITIES AS INDICATED, OR AS NECESSARY FOR CONSTRUCTION.
- PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES, INCLUDING IRRIGATION SLEEVING, PRIOR TO INSTALLATION OF PAVED SURFACES.
- THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.
- SITE WORK CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH TO ALL SURFACES. SITE WORK CONCRETE SHALL BE CLASS 'A' (4000 PSI @ 28 DAYS) UNLESS OTHERWISE NOTED.
- ALL DAMAGE TO EXISTING PAVEMENT TO REMAIN, WHICH RESULTS FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH LIKE MATERIALS AT THE CONTRACTOR'S EXPENSE.
- SITE DIMENSIONS SHOWN ARE TO THE FACE OF CURB, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MAINTAIN ONE SET OF AS-BUILT / RECORD DRAWINGS ON-SITE DURING CONSTRUCTION FOR DISTRIBUTION TO THE OWNER AND/OR OWNER'S REPRESENTATIVE UPON COMPLETION.
- REFER TO THE ARCHITECTURAL, PLUMBING & ELECTRICAL DRAWINGS FOR EXACT DIMENSIONS AND LOCATIONS OF UTILITY SERVICE ENTRY LOCATIONS AND PRECISE BUILDING DIMENSIONS.
- THIS SITE LAYOUT IS SPECIFIC TO THE APPROVALS NECESSARY FOR THE CONSTRUCTION IN ACCORDANCE WITH THE CITY OF SHEBOYGAN. NO CHANGES TO THE SITE LAYOUT ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CHANGES MADE TO THE SITE LAYOUT WITHOUT APPROVAL IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CHANGES INCLUDE BUT ARE NOT LIMITED TO, INCREASED IMPERVIOUS PAVEMENT, ADDITION / DELETION OF PARKING SPACES, MOVEMENT OF CURB LINES, CHANGES TO DRAINAGE STRUCTURES AND PATTERNS, LANDSCAPING, ETC.

## GRADING NOTES

- ALL PROPOSED GRADES SHOWN ARE FINAL GRADES, TOP OF GROUND LEVEL, OR TOP OF PAVEMENT, OR GRATE ELEVATION AT THE DRAINAGE POINT, UNLESS INDICATED OTHERWISE.
- REFER TO AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT BY ECS xxxxxx, LLC TITLED xx-xxxx MCDONALD'S SHEBOYGAN, WI (REPORT DATED: xxxxx xx, xxxxx).
- SITE BUILDING PAD EXCAVATION AND CONSTRUCTION TO BE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS (REPORT DATED: xxxxx xx, xxxxx). BUILDING PAD PREPARATION SHALL BEGIN BY CLEARING & STRIPPING UNSUITABLE MATERIAL FROM PAD SITE, THEN PLACEMENT & COMPACTION OF BACKFILL MATERIAL PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. ALL BACKFILL MATERIAL MUST BE ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.
- ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. (REPORT DATED: xxxxx xx, xxxxx).
- ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
- CONTRACTOR SHALL STRICTLY ADHERE TO THE EROSION & SEDIMENT CONTROL PLAN PREPARED FOR THIS PROJECT.
- EARTHWORK SHALL INCLUDE CLEARING AND GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, MASS GRADING, EXCAVATION, FILLING, UNDER CUT AND REPLACEMENT, IF REQUIRED, AND COMPACTION.
- CONTRACTOR TO REFILL UNDERCUT AREAS WITH SUITABLE MATERIAL AND COMPACT AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- PLACE TOPSOIL OVER THE SUBGRADE OF UNPAVED, DISTURBED AREAS TO A DEPTH INDICATED ON THE LANDSCAPE PLANS (6" MINIMUM).
- PAVEMENT SLOPES ACROSS ACCESSIBLE PARKING STALLS AND ADJOINING ACCESS AISLES SHALL BE MAXIMUM 2% AND SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
- ALL SLOPES IN NON-PAVED AREAS SHALL BE 3:1 (HORIZONTAL:VERTICAL) MAXIMUM UNLESS NOTED OTHERWISE.
- ALL AREAS NOT PAVED SHALL BE STABILIZED IN ACCORDANCE WITH THE EROSION & SEDIMENT CONTROL PLAN, UNLESS NOTED OTHERWISE.
- COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS UNLESS NOTED OTHERWISE. ALL FILLS SHALL BE CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY OR AN INSPECTOR FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
- ALL EXCESS SOIL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK BY IMPORTING OR EXPORTING AS NECESSARY TO ACHIEVE DESIGN GRADES AND SPECIFICATIONS.

## STORM DRAINAGE NOTES

- DISTANCES SHOWN ON PIPING ARE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL NEW STORMWATER MANAGEMENT FACILITIES CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE REGULATING AGENCIES CONCERNING INSTALLATION, INSPECTION AND APPROVAL OF THE STORM DRAINAGE SYSTEM CONSTRUCTION.
- ALL STORMWATER MANAGEMENT FACILITIES, INCLUDING COLLECTION AND CONVEYANCE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
- ANY FIELD TILE CUT IN EXCAVATION, WHICH DRAINS AN OFFSITE AREA, MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
- FOR EXACT LOCATION OF DOWN SPOUTS & ROOF DRAINS, CONTRACTOR IS TO COORDINATE WITH ARCHITECTURAL AND PLUMBING DRAWINGS.
- ALL PROPOSED STORM SEWERS, SURFACE OR OTHER DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNER.
- ALL STORM STRUCTURES ARE WISDOT TYPES UNLESS OTHERWISE INDICATED.
- ALL CATCH BASINS AND MANHOLES WITH A DEPTH GREATER THAN 4' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF CITY OF SHEBOYGAN OR WISDOT.
- STORM SEWER IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL--AGGREGATES NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" / PER CITY OF CHEBOYGAN OR WISDOT ABOVE THE PIPE.

## UTILITY NOTES

- ALL PROPOSED UTILITY LINES AND EXTENSIONS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CORRESPONDING UTILITY AGENCY / DISTRICT / MUNICIPALITY / COMPANY SPECIFICATIONS. CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTIONS WITH THE APPROPRIATE AGENCY.
- THE CONTRACTOR IS PARTICULARLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES SHOWN HEREON IS BASED ON TOPOGRAPHIC SURVEYS AND RECORD DRAWINGS. THE CONTRACTOR SHALL NOT RELY UPON THIS INFORMATION AS BEING EXACT OR COMPLETE. SHOULD UNMARKED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION AND REQUEST FIELD VERIFICATION OF UTILITY LOCATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE EXISTING UTILITIES CONFLICTING WITH IMPROVEMENTS SHOWN HEREON IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- MAINTAIN MINIMUM 10-FOOT HORIZONTAL AND 18-INCH MINIMUM VERTICAL SEPARATION BETWEEN SANITARY SEWER, STORM SEWER AND WATER SUPPLY LINE, UNLESS OTHERWISE INDICATED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES, GAS LINES, AND UNDERGROUND ELECTRIC DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. INSTALL UTILITIES PRIOR TO PAVEMENT CONSTRUCTION.
- ALL TRENCH SPOILS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- SANITARY SEWER SHALL BE PVC-SDR 35 PER ASTM D-3034 OR APPROVED EQUAL TO CITY OR COUNTY WATER & SEWER DEPARTMENT RULES AND REGULATIONS) INSTALLED AT A MINIMUM SLOPE OF ONE PERCENT (1.00%) UNLESS OTHERWISE NOTED SANITARY SERVICE SHALL BE INSTALLED AT A MINIMUM DEPTH OF FOUR FEET (4') UNLESS OTHERWISE NOTED. A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED AT ALL WATERLINE & STORM SEWER CROSSINGS. SANITARY SERVICE JOINTS ALL CONFORM TO ASTM D-3212.
- SANITARY SEWER IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL--AGGREGATES NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" / PER STATE OR CITY DOT ABOVE THE PIPE.
- DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE, CONTRACTOR RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM & SANITARY STRUCTURES ARE SHOWN TO THE CENTER STRUCTURE. UNLESS OTHERWISE NOTED.
- ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.
- ADJUST ALL EXISTING UTILITY SURFACE FEATURES INCLUDING BUT NOT LIMITED TO CASTINGS, VALVE BOXES, PEDESTALS, CLEANOUTS, ETC. TO MATCH PROPOSED FINISHED GRADES, UNLESS OTHERWISE INDICATED.
- THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF ALL IMPROVEMENTS. INCLUDE AT LEAST TWO DIMENSIONS TO EACH VALVE AND MANHOLE FROM KNOWN SITE FEATURES. DRAWINGS SHALL INCLUDE HORIZONTAL AND VERTICAL INFORMATION ON ALL NEW UTILITIES AS WELL AS EXISTING UTILITIES ENCOUNTERED.
- MECHANICAL/ELECTRICAL CONTRACTORS SHALL BRING ALL UTILITIES 5' OUTSIDE BUILDING WALL. COORDINATE WITH CONSTRUCTION MANAGER.
- ALL WATERLINE CROSSINGS SHALL MAINTAIN A VERTICAL SEPARATION OF 18" MINIMUM. SANITARY SEWER SHALL BE LOCATED 18" BELOW WATERMAIN AT ALL CROSSINGS. WATERMAIN SHALL BE LOCATED A MINIMUM OF 10' HORIZONTALLY FROM ANY SANITARY SEWER OR STORM SEWER. ALL MEASUREMENTS SHALL BE TAKEN FROM OUTSIDE OF SEWER PIPE TO THE OUTSIDE OF WATERMAIN PIPE. ONE FULL LENGTH OF WATERMAIN PIPE SHALL BE LOCATED AT ALL CROSSINGS TO ENABLE BOTH JOINTS TO BE LOCATED AS FAR FROM SEWER AS POSSIBLE.
- WATERLINE IS TO BE BEDDED WITH CLEAN GRANULAR MATERIAL--AGGREGATES NOT TO BE LARGER THAN 3/4" AND NOT SMALLER THAN NO. 8 SIEVE, FREE OF SILT AND FINES, AASHTO M43 SIZE #67, 7 OR 8. BEDDING TO BE MINIMUM OF 6" BELOW & 12" / PER STATE OR CITY DOT ABOVE THE PIPE.

REVISION RECORD

DESCRIPTION

NO. DATE

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Moon Township, PA 15108  
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www.cecinc.com



Civil & Environmental  
Consultants, Inc.

MCDONALD'S RESTAURANT  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081



GENERAL NOTES

DATE: 04/20/2026 DRAWN BY: JTC

DWG SCALE: 1"=20' CHECKED BY: JCW

PROJECT NO: 387-510

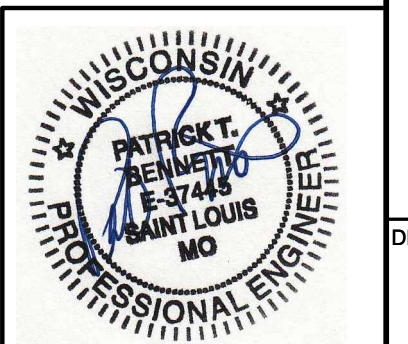
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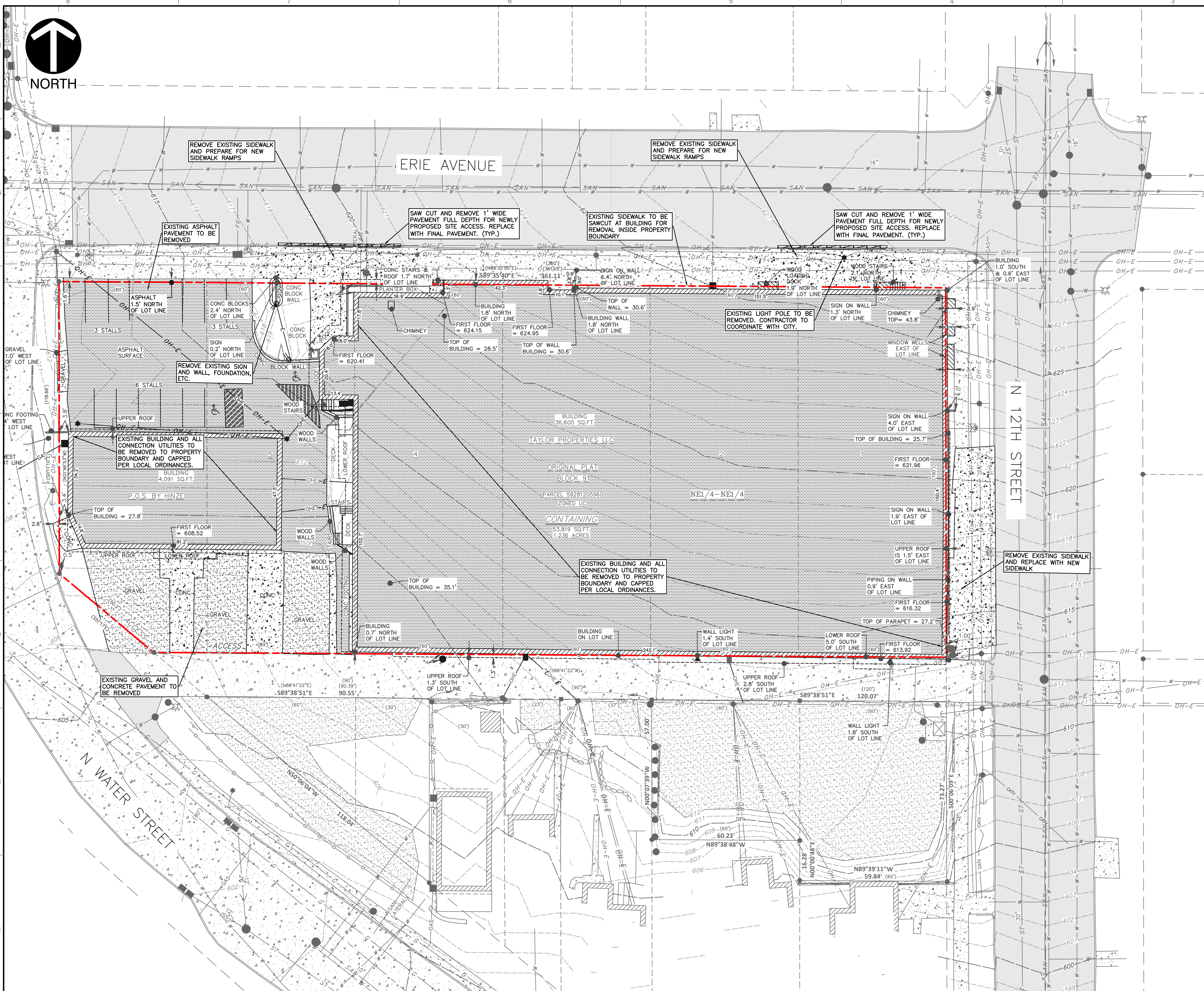
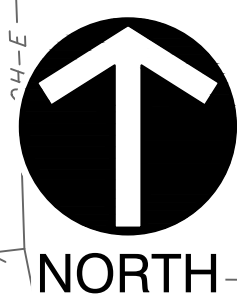
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SHEET 02 OF 24

\*HAND SIGNATURE ON FILE



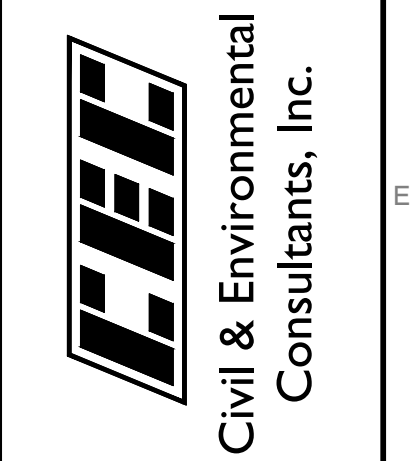


**LEGEND**

- 3/4" X 18" IRON ROD SET (WT. = 1.5 LBS. / L.F.)
- DRILL HOLE SET
- ▲ MAG NAIL FND.
- 3/4" IRON PIPE FND.
- 1" IRON PIPE FND.
- CHISELED "V" IN CONCRETE FND
- GUARD POST
- BUILDING LIGHT
- POWER POLE
- GUY WIRE
- HANDICAP PARKING STALL
- SIGN
- TELEPHONE PEDESTAL
- TELEPHONE MANHOLE
- CABLE TELEVISION PEDESTAL
- FIBER MANHOLE
- GAS METER
- GAS BOX
- ELECTRIC BOX
- ELECTRIC METER
- ELECTRIC OUTLET
- FIRE HYDRANT
- WATER BOX
- WALL FIRE HYDRANT
- WATER VALVE
- CATCH BASIN
- CLEAN OUT
- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- STORM SEWER LINE
- WATER LINE - APPROXIMATE LOCATION PER PLANS PROVIDED BY COMMUNITY ACTUAL MARKING NOT PROVIDED
- OVERHEAD UTILITY LINE
- GAS LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND CABLE TV
- WOOD FENCE
- ( ) PREVIOUS SURVEY OR RECORD INFO.
- ▨ INDICATES NO PARKING
- ▨ CONCRETE SURFACE
- ▨ GRAVEL SURFACE
- ▨ ASPHALT SURFACE
- ▨ ASPHALT PAVEMENT TO BE DEMOLISHED
- ▨ CONCRETE PAVEMENT TO BE DEMOLISHED
- ▨ EXISTING STRUCTURE TO BE DEMOLISHED
- ▨ UTILITIES TO BE REMOVED

NO.	DATE	DESCRIPTION

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph. 412.429.2324 - 800.365.2324  
www.cecinc.com



**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081



<b>EXISTING CONDITIONS AND DEMO PLAN</b>	
DATE: 04/20/2026	DRAWN BY: JTC
DWG SCALE: 1"=20'	CHECKED BY: JCW
PROJECT NO: 387-510	APPROVED BY: [Signature]
DRAFT	

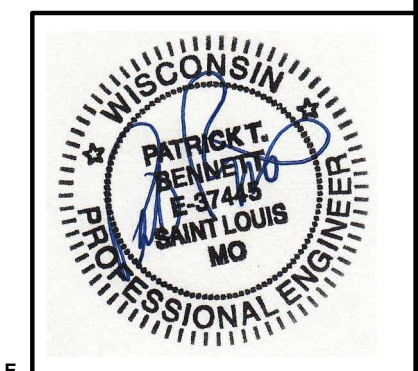
DRAWING NO.: **C100**  
SHEET 03 OF 24



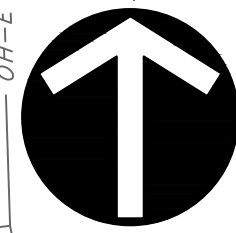
PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.



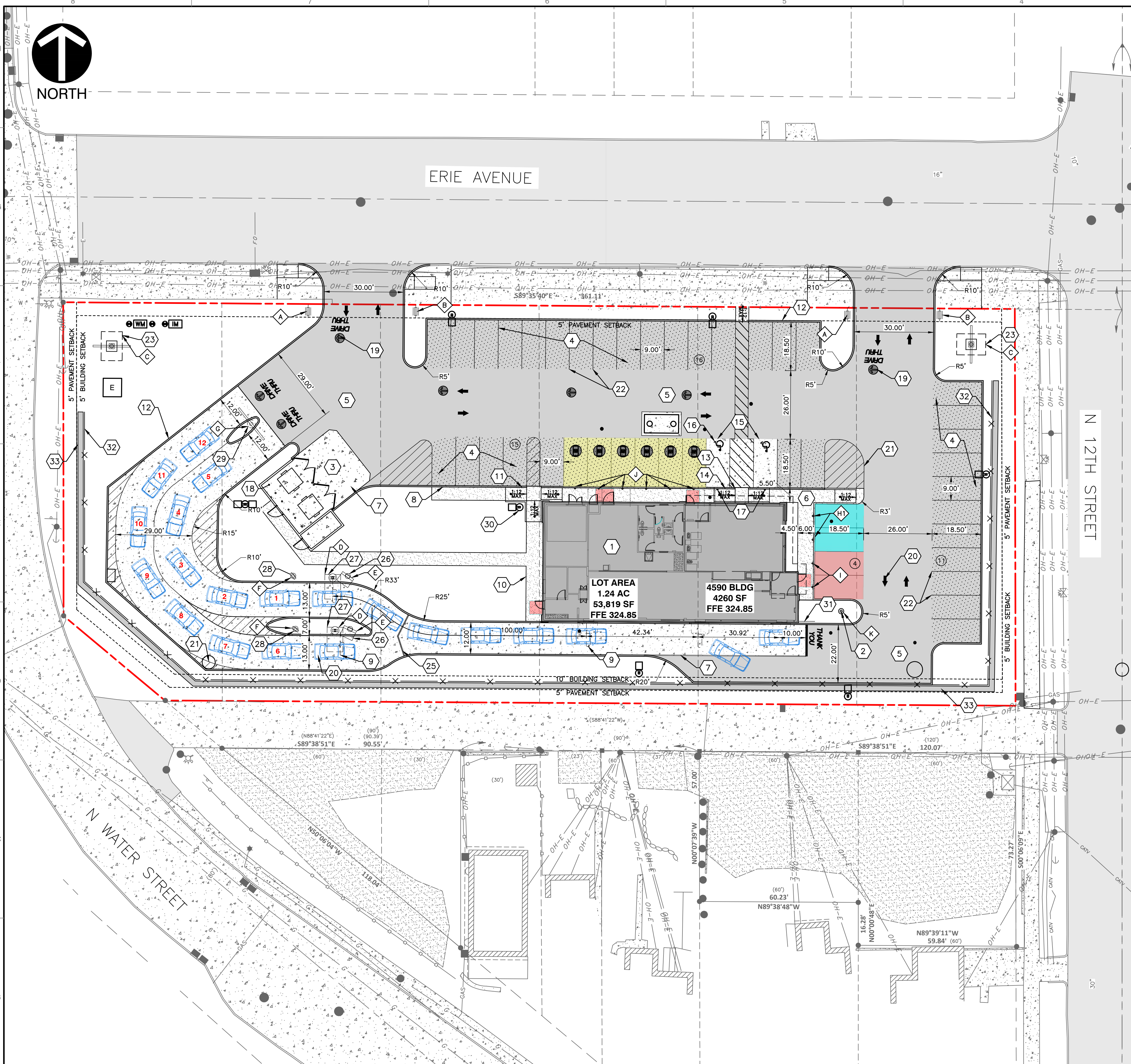
\*HAND SIGNATURE ON FILE



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NORTH



- LEGEND**
- PROPERTY BOUNDARY
  - PROPOSED CURB
  - PROPOSED BUILDING
  - PROPOSED ASPHALT (DRIVE AISLES)
  - PROPOSED ASPHALT (PARKING)
  - PROPOSED CONCRETE
  - PROPOSED SIDEWALK
  - PROPOSED STRIPING
  - PROPOSED DRIVE-THRU PARKING
  - PROPOSED MCDELIVERY PARKING
  - PROPOSED CURB SIDE PICK-UP PARKING

**NOTE:**  
 1. BOLTS AT GROUND MOUNTED SIGNS AND DRIVE-THRU EQUIPMENT ARE TO BE COVERED BY MULCH.  
 2. EXCEPT WHERE NOTED OTHERWISE, ALL DIMENSIONS ARE FROM FACE OF CURB.

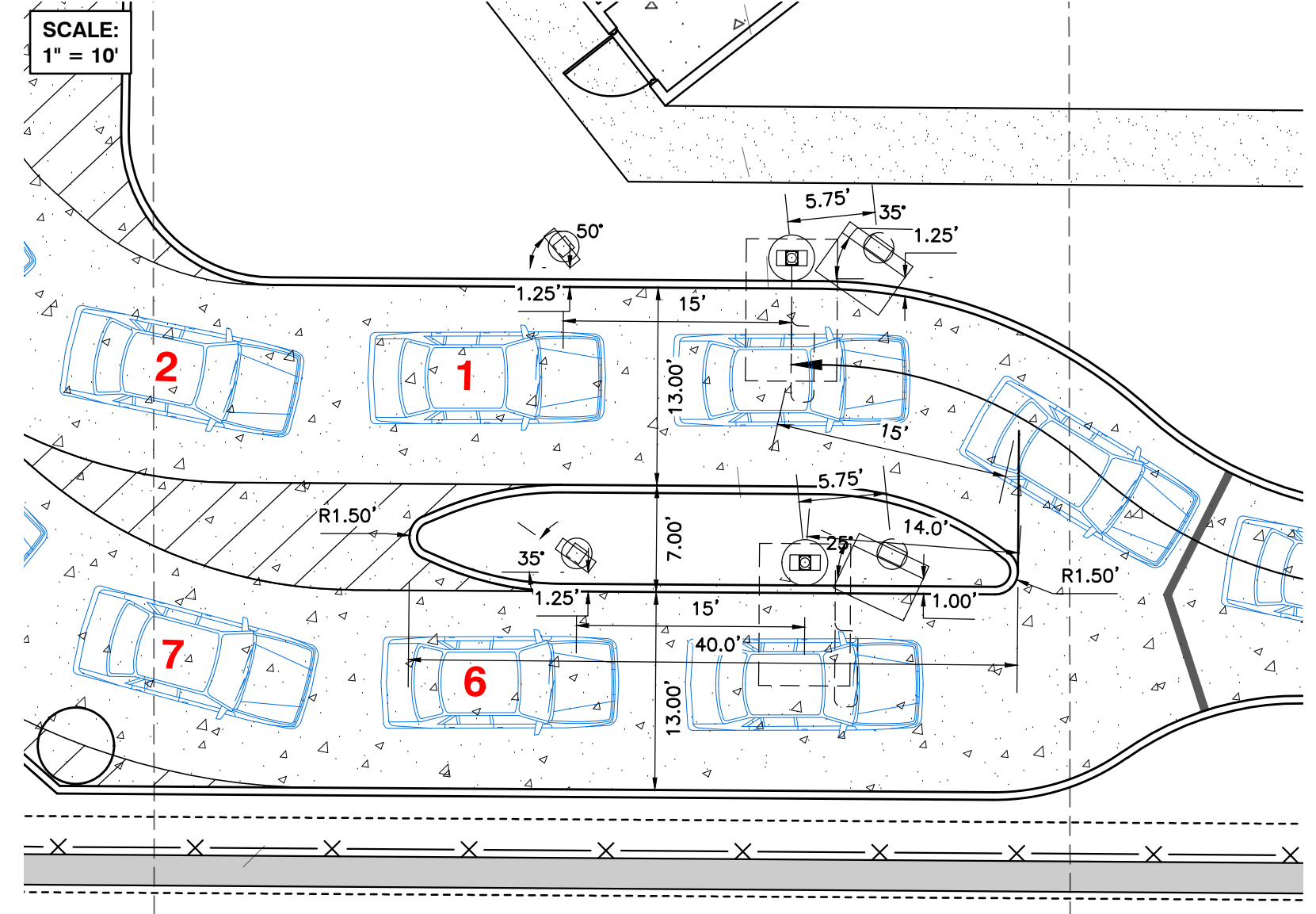
**MCDONALD'S SIGN LEGEND**

- ◆ MCDONALD'S DIRECTIONAL ENTER SIGN. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS.
- ◆ MCDONALD'S DIRECTIONAL EXIT SIGN. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS.
- ◆ MCDONALD'S ROAD SIGN. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR DETAILS.
- ◆ MCDONALD'S DRIVE-THRU CANOPY. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS.
- ◆ MCDONALD'S DIGITAL MENU BOARD. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS.
- ◆ MCDONALD'S DIGITAL PRE-BROWSE MENU BOARD. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS.
- ◆ MCDONALD'S GATEWAY SIGN (DOUBLE ARM). REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS.
- ◆ MCDONALD'S PULL FORWARD - ("RESERVED") DRIVE-THRU SIGN. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR DETAILS.
- ◆ MCDONALD'S MCDELIVERY - ("COURIER PARKING") SIGN. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR DETAILS.
- ◆ MCDONALD'S ("CURBSIDE PICK UP") SIGN. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR DETAILS.
- ◆ FLAGPOLE AND BASE. REFER TO ARCHITECTURAL AND/OR SIGN VENDOR PLANS FOR SIGN AND STRUCTURAL DETAILS. GENERAL CONTRACTOR TO COORDINATE WITH CONSTRUCTION MANAGER REGARDING ILLUMINATION OF FLAG.

**NOTE:**  
 ALL SIGNS/LOCATIONS/ORIENTATION SHALL BE CONFIRMED BY MCDONALD'S/OPERATOR AND COORDINATED WITH SIGNAGE BRAND BOOK (BY OTHERS).

**KEY NOTES**

- 1 PROPOSED BUILDING. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- 2 PROPOSED 30' FLAG POLE AND BASE. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. GENERAL CONTRACTOR TO COORDINATE WITH CONSTRUCTION MANAGER REGARDING ILLUMINATION OF FLAG.
- 3 PROPOSED TRASH ENCLOSURE WITH STORAGE. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- 4 PROPOSED ASPHALT (LIGHT DUTY) PAVEMENT. REFER TO DETAIL #03A ON C800.
- 5 PROPOSED ASPHALT (HEAVY DUTY) PAVEMENT. REFER TO DETAIL #03B ON C800.
- 6 PROPOSED CONCRETE (LIGHT DUTY) PAVEMENT. REFER TO DETAIL #02A ON C800.
- 7 PROPOSED CONCRETE (HEAVY DUTY) PAVEMENT. REFER TO DETAIL #02B ON C800.
- 8 COMBINATION CONCRETE CURB/SIDEWALK
- 9 PROPOSED DETECTOR LOOP. REFER TO DETAIL #13 AND ELECTRICAL PLANS.
- 10 PROPOSED ADA COMPLIANT CONCRETE WALK. REFER TO DETAIL #12 ON C801.
- 11 PROPOSED ADA COMPLIANT COMBINATION CURB / SIDEWALK. REFER TO DETAIL #5 ON C800.
- 12 PROPOSED 6" VERTICAL CONCRETE CURB. REFER TO DETAIL #10 ON C800.
- 13 PROPOSED ADA ACCESSIBLE DEPRESSED CURB RAMP. REFER TO DETAIL #6 ON C800.
- 14 PROPOSED ADA ACCESSIBLE CURB RAMP. REFER TO DETAIL #7 ON C800.
- 15 PROPOSED ADA ACCESSIBLE SPACES. REFER TO DETAIL #15.
- 16 PROPOSED PAINTED ADA ACCESSIBLE PARKING SYMBOL. REFER TO DETAIL #15 ON C801.
- 17 PROPOSED ADA ACCESSIBLE PARKING SIGN(S). REFER TO DETAIL #11 ON C800.
- 18 PROPOSED BOLLARD. REFER TO DETAIL #08 ON C800.
- 19 PROPOSED BRANDED PAVEMENT STRIPING PER MCDONALD'S STANDARDS. REFER TO DETAIL #18 ON C802.
- 20 PROPOSED PAINTED DIRECTIONAL ARROWS. REFER TO DETAIL #16 ON C802.
- 21 PROPOSED PAVEMENT STRIPING. REFER TO DETAIL #17 ON C802.
- 22 PROPOSED PARKING STRIPING (WHITE).
- 23 PROPOSED FREESTANDING SIGN
- 24 PROPOSED DRIVE THRU LANE STRIPING (6" WIDE) PER MCDONALD'S STANDARDS.
- 25 PROPOSED MERGE STRIPING (6" WIDE) PER MCDONALD'S STANDARDS.
- 26 PROPOSED MENU BOARD. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- 27 PROPOSED DRIVE-THRU CANOPY WITH DIGITAL ORDER BOARD. REFER TO ARCHITECTURAL PLAN FOR DETAILS.
- 28 PROPOSED PRE-ORDER MENU BOARD. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- 29 PROPOSED SINGLE GATEWAY SIGN. PER TO MCDONALD'S STANDARDS.
- 30 PROPOSED LOT LIGHT. REFER TO PHOTOMETRIC PLAN (BY OTHERS).
- 31 PROPOSED SITE PROOF FENCE REFER TO ARCH PLANS.
- 32 PROPOSED CURB CUT
- 33 PROPOSED RETAINING WALL. REFER TO STRUCTURAL.



DRIVE THRU ORDER AREA DIMENSIONAL CONTROL



\*HAND SIGNATURE ON FILE

NO	DATE	DESCRIPTION

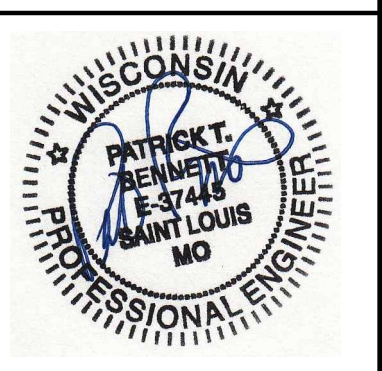
700 Cherrington Parkway  
 Moon Township, PA 15108  
 Ph. 412.429.2324 - 800.365.2324  
 www.cecinco.com



**MCDONALD'S RESTAURANT**  
 NSN (45569) SITE NO (048-1099)  
 1221 ERIE AVENUE,  
 SHEBOYGAN, WI 53081



<b>SITE PLAN</b>		JTC
DATE: 04/20/2026	DRAWN BY: JWC	JWC
DWG SCALE: 1"=20'	CHECKED BY: JWC	387.510
PROJECT NO:	APPROVED BY:	DRAFT

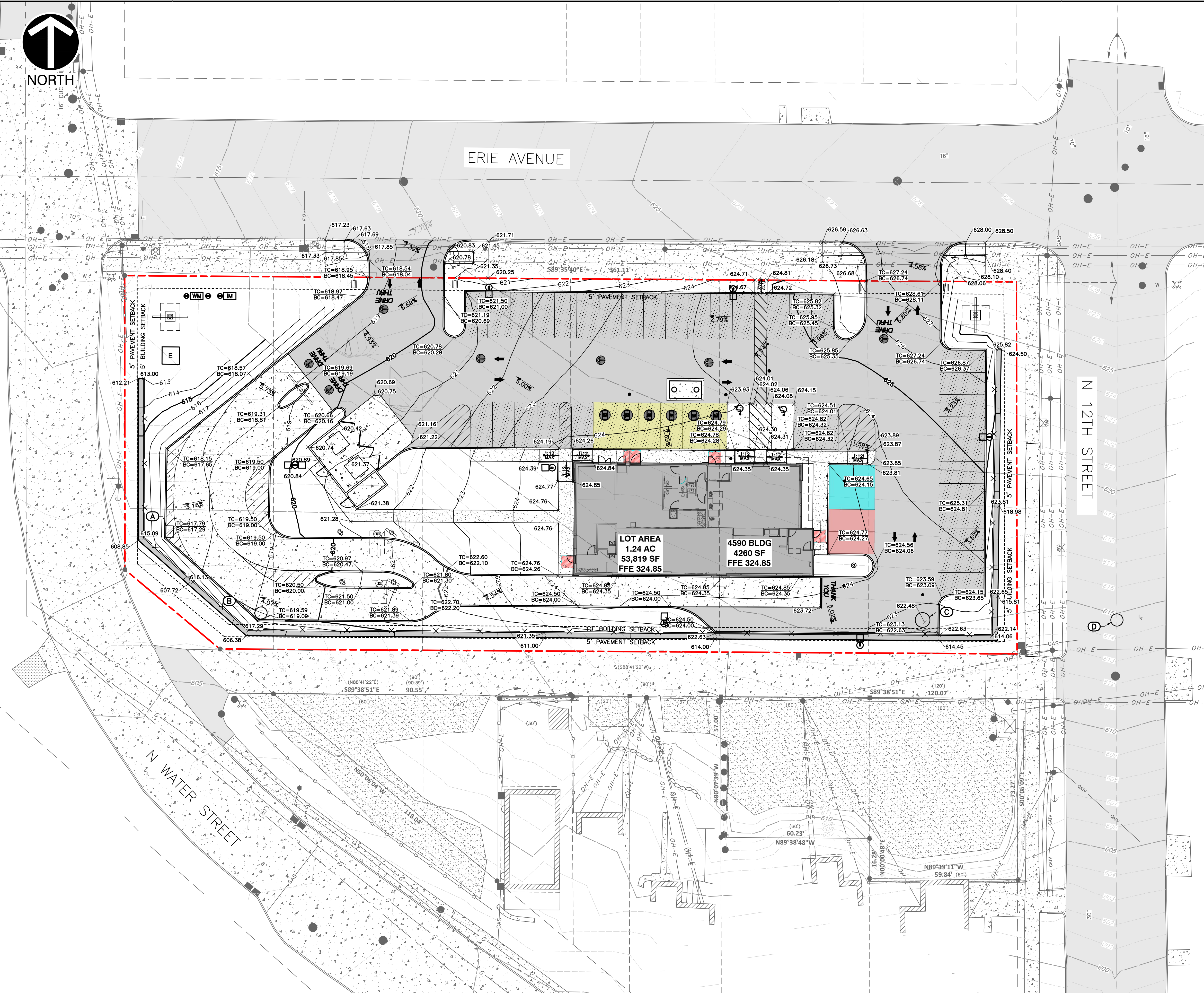
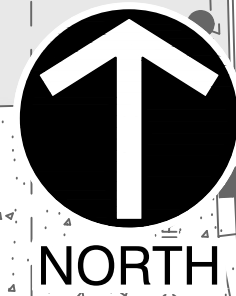


DRAWING NO: **C200**  
 SHEET 04 OF 24

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PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AGENCIES.



**LEGEND**

- PROPERTY BOUNDARY
- PROPOSED CURB
- PROPOSED BUILDING
- PROPOSED ASPHALT (DRIVE AISLES)
- PROPOSED ASPHALT (PARKING)
- PROPOSED CONCRETE
- PROPOSED SIDEWALK
- PROPOSED STRIPING
- PROPOSED DRIVE-THRU PARKING
- PROPOSED MCDELIVERY PARKING
- PROPOSED CURB SIDE PICK-UP PARKING
- TC TOP OF CURB
- BC BACK OF CURB
- TG TOP OF GROUND
- BR BOTTOM OF RAMP
- HIGH PT HIGH POINT
- TW TOP OF WALL ELEV
- BW GRADE ELEV AT BOTTOM OF WALL

**EARTHWORK TABLE**

CUT	703 CY
FILL	9,064 CY
NET TOTAL	8,361 CY (FILL)
TOTAL TOPSOIL (1' DEPTH ASSUMED)	0 CY
GRADING AREA	1.26 ACRES

**NOTE:**  
 1. BOLTS AT GROUND MOUNTED SIGNS AND DRIVE-THRU EQUIPMENT ARE TO BE COVERED BY MULCH.  
 2. EXCEPT WHERE NOTED OTHERWISE, ALL DIMENSIONS ARE ROM FACE OF CURB.

**REVISION RECORD**

NO	DATE	DESCRIPTION

700 Cherrington Parkway  
 Moon Township, PA 15108  
 Ph. 412.429.2324 - 800.365.2374  
 www.cecinco.com

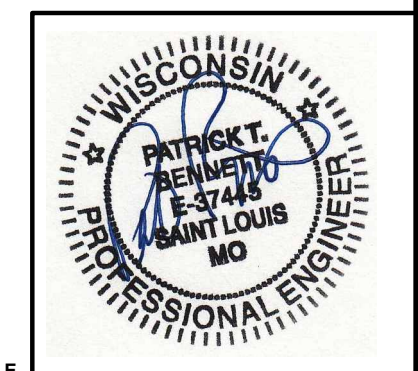


**McDONALD'S RESTAURANT**  
 NSN (45569) SITE NO (048-1099)  
 1221 ERIE AVENUE,  
 SHEBOYGAN, WI 53081



**GRADING PLAN**

DATE:	04/20/2025	DRAWN BY:	JTC
DWG SCALE:	1"=20'	CHECKED BY:	JCW
PROJECT NO:	357-510	APPROVED BY:	DRAFT



DRAWING NO: **C300**  
 SHEET 05 OF 24



PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.

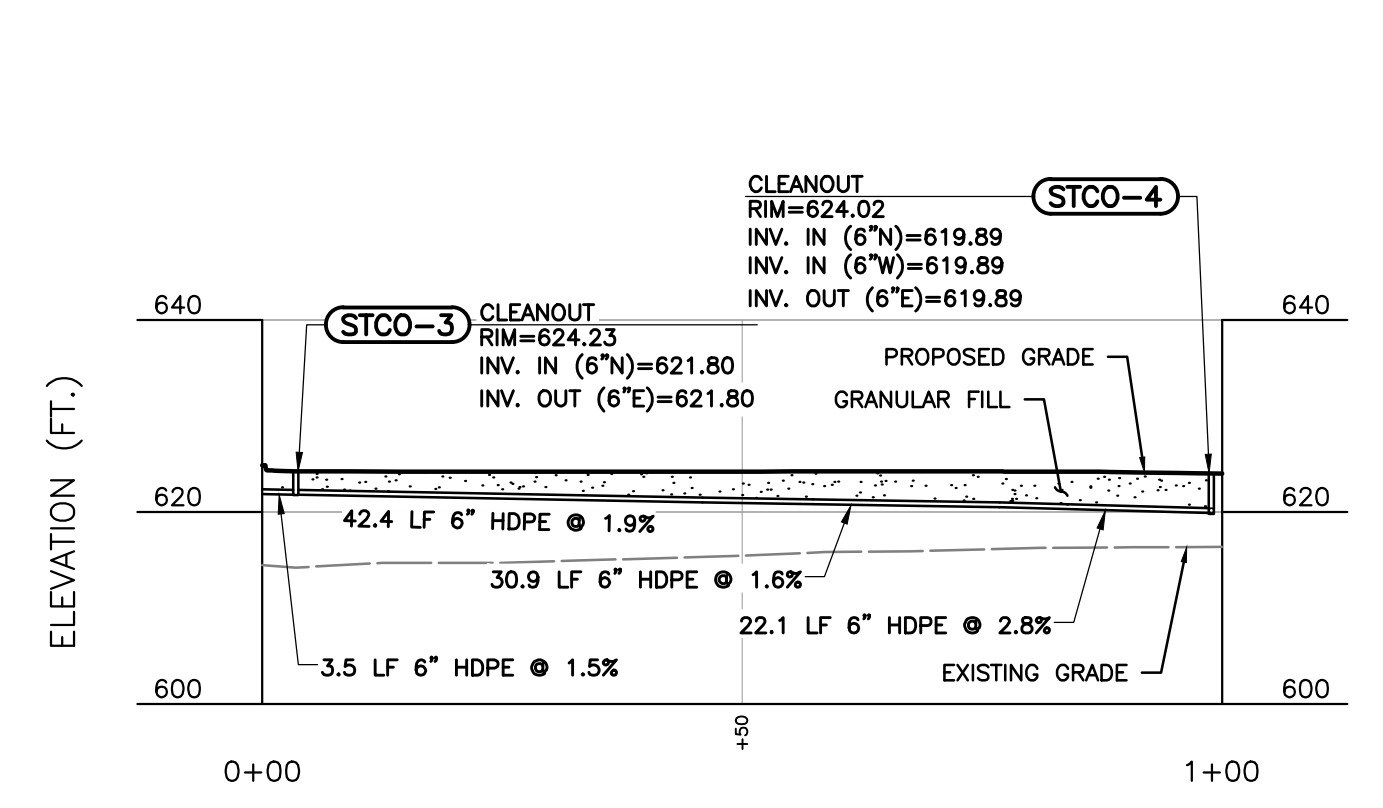


\*HAND SIGNATURE ON FILE

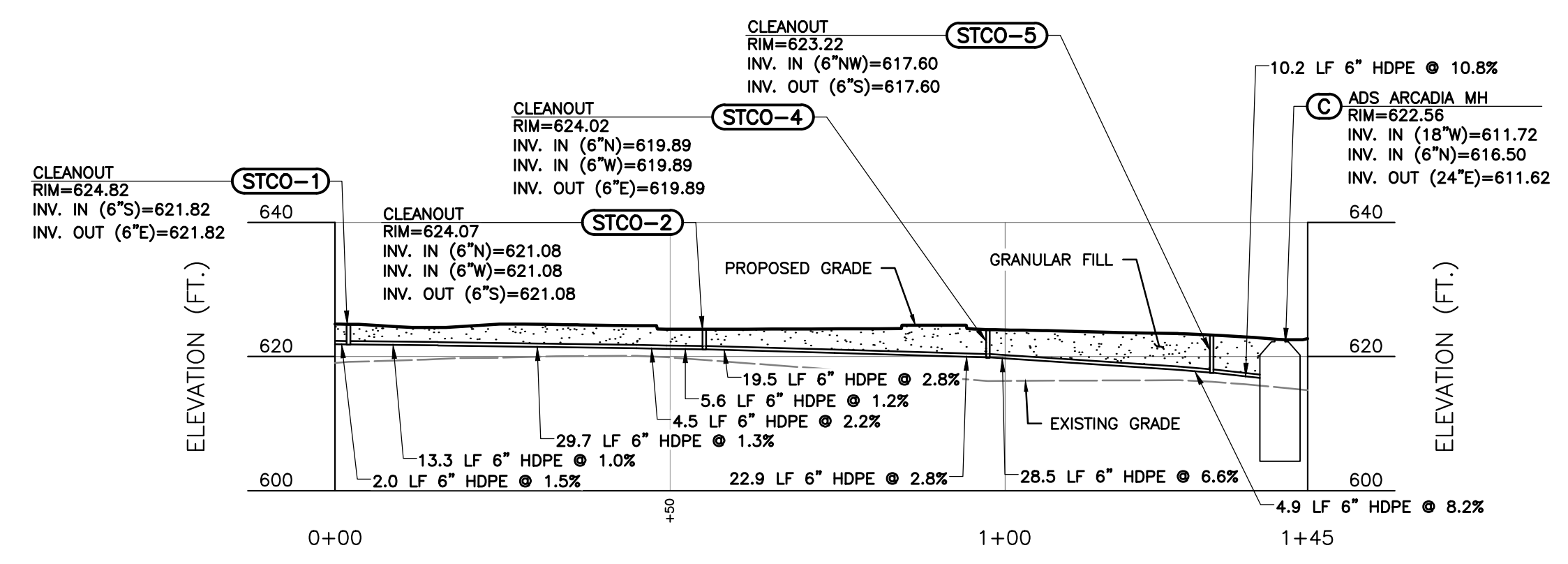
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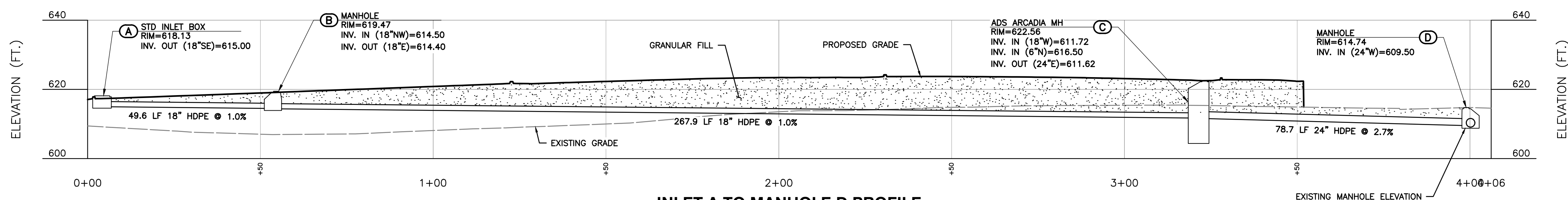
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**CANOPY DRAIN PROFILE**  
SCALE H:1"=20'; V:1"=20'



**ROOF DRAIN PROFILE**  
SCALE H:1"=20'; V:1"=20'



**INLET A TO MANHOLE D PROFILE**  
SCALE H:1"=20'; V:1"=20'

NO.	DATE	DESCRIPTION

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph: 412.429.2324 · 800.365.2324  
www.cecinc.com

**CEC**  
Civil & Environmental  
Consultants, Inc.

**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081

**M**

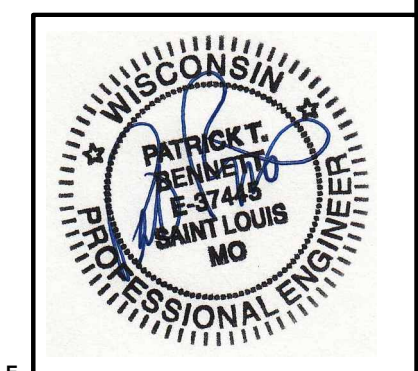
**STORMWATER UTILITY PROFILES**

DATE: 04/20/2026 | DRAWN BY: JTC | JTC  
DWG SCALE: 1"=20' | CHECKED BY: JOW | 357-510  
PROJECT NO.:  
APPROVED BY:

DRAFT



PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.

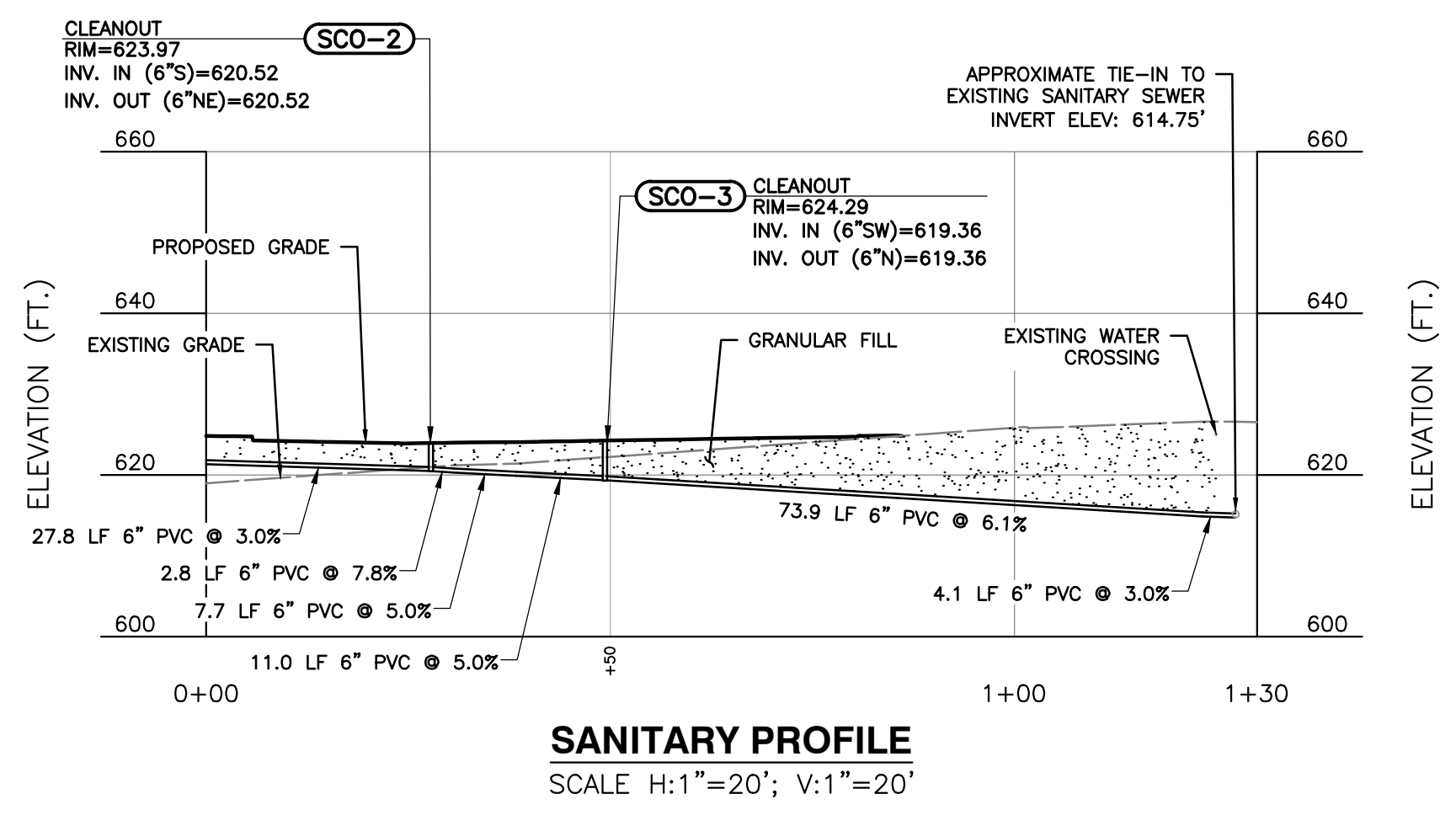
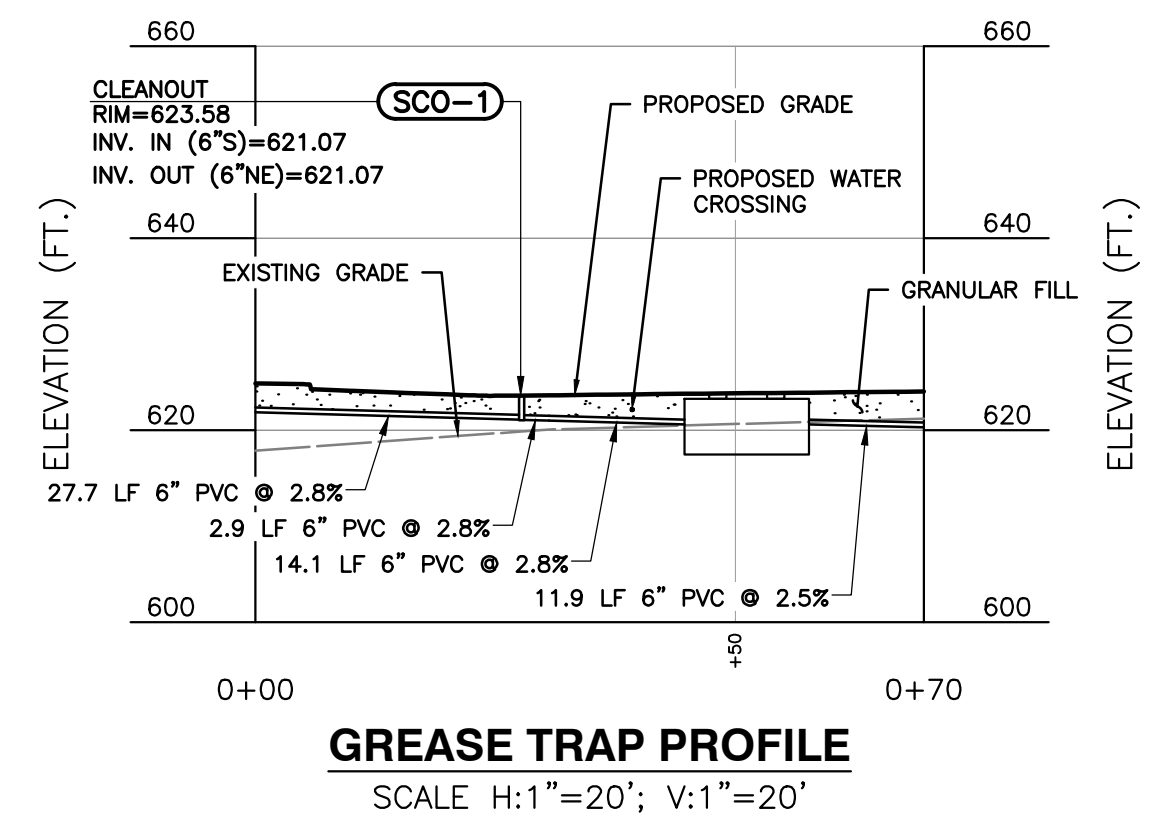


DRAWING NO.: **C501**  
SHEET 07 OF 24

\*HAND SIGNATURE ON FILE

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H G F E D C B A



**REVISION RECORD**

NO.	DATE	DESCRIPTION

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph: 412.429.2324 · 800.365.2324  
www.cecinco.com

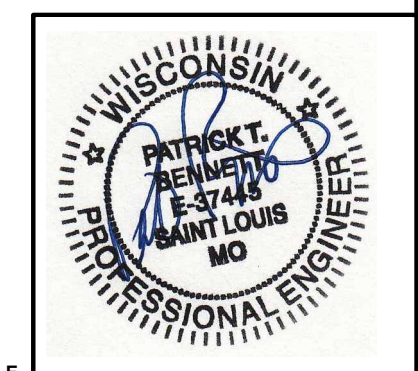
**C&E**  
Civil & Environmental  
Consultants, Inc.

**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081

**SANITARY UTILITY PROFILES**

DRAWING NO: **C502**

DATE: 04/20/2026 | DRAWN BY: JTC | JTC  
DATE SCALE: 1"=20' | CHECKED BY: JOW | JOW  
PROJECT NO: 357-510  
APPROVED BY: DRAFT



PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.

\*HAND SIGNATURE ON FILE

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SHEET 08 OF 24



# PLANTING NOTES

- THE QUANTITIES INDICATED ON THE PLANT MATERIALS SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE LANDSCAPE CONTRACTOR BUT SHOULD NOT BE ASSUMED TO BE CORRECT. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES INDICATED. ANY DISCREPANCIES NOTED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION. IN THE EVENT OF A DISCREPANCY, THE DRAWINGS SHALL GOVERN.
- NO SUBSTITUTIONS AS TO SIZE, TYPE, SPACING, QUANTITY OR QUALITY OF PLANT MATERIAL SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT. CHANGES IN PLANT MATERIAL MAY REQUIRE RE-APPROVAL BY LOCAL AUTHORITIES. CONTRACTOR IS NOT TO SEEK RE-APPROVAL WITHOUT EXPRESS WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.
- ALL PLANTS MUST BE NURSERY GROWN, HEALTHY, VIGOROUS, AND FREE FROM ALL PESTS AND DISEASE, BALL AND BURLAP (B&B) OR CONTAINER GROWN AS SPECIFIED IN THE MATERIALS SCHEDULE. ALL PLANTS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z-60, LATEST EDITION FOR SIZE AND QUALITY.
- ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED, WITH A SINGLE DOMINANT LEADER, AND MEET THE MINIMUM REQUIREMENTS. TREES WITH A "Y" SHAPE ARE NOT ACCEPTABLE.
- ALL PLANTS ARE SUBJECT TO REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE AT ANY TIME PRIOR TO FINAL ACCEPTANCE.
- THE DIMENSIONS FOR HEIGHT, SPREAD, AND CALIPER AS SPECIFIED IN THE PLANT MATERIALS SCHEDULE ARE THE MINIMUM DESIRED FOR EACH PLANT. EACH PLANT SHALL BE UNIFORM AND CONSISTENT AS IT PERTAINS TO THE SPECIFICATIONS AND THE INDIVIDUAL SPECIES. ANY PLANT MATERIAL WHICH FAILS THESE SPECIFICATIONS WILL BE REJECTED. THE CONTRACTOR SHALL PROVIDE ACCEPTABLE MATERIAL AT NO ADDITIONAL COST TO THE OWNER. CALIPER SIZE IS NOT TO BE REDUCED. TREES THAT FAIL MINIMUM CALIPER SIZE AS MEASURED IN THE FIELD WILL BE REJECTED AND REPLACEMENTS SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST. CALIPER MEASUREMENTS SHALL BE MADE IN ACCORDANCE WITH ANSI STANDARDS.
- PRIOR TO COMMENCEMENT OF INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND SHALL AVOID DAMAGING UTILITIES DURING INSTALLATION. ANY UTILITIES DAMAGED DURING INSTALLATION SHALL BE REPAIRED BY THE LANDSCAPE CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY. ALL REPAIRS SHALL BE AT NO COST TO THE OWNER. NO TREES SHALL BE PLANTED WITHIN 10' OF SITE UTILITY LINES. FIELD ADJUST AS NECESSARY AFTER LANDSCAPE ARCHITECT'S APPROVAL.
- THE LANDSCAPE CONTRACTOR SHALL FIELD STAKE ALL PLANT LOCATIONS PRIOR TO INSTALLATION. THE LANDSCAPE ARCHITECT SHALL APPROVE ALL STAKED LOCATIONS PRIOR TO INSTALLATION. PLANTS INSTALLED PRIOR TO APPROVAL BY THE LANDSCAPE ARCHITECT ARE SUBJECT TO REJECTION AND/OR REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.
- PRE-EMERGENT HERBICIDES, TRIFLURALIN OR EPTAM, SHALL BE APPLIED TO ALL PLANTING BEDS. APPLY AT MANUFACTURERS RECOMMENDATIONS. HERBICIDES SHALL BE INCORPORATED INTO THE SOIL MIXES.
- APPLY ROOT STIMULATOR CONTAINING MICORRHIZAZA TO ALL PLANTS PRIOR TO BACK FILLING. APPLY AT MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUBMIT SAMPLES OF ROOT STIMULATOR TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO USE.
- ALL DISTURBED AREAS NOT RECEIVING MULCH OR OTHER SPECIFIED IMPROVEMENTS ARE TO BE FINE GRADED TO TRANSITION SMOOTHLY INTO ADJACENT GRADES AND RECEIVE BERMUDA SOIL. SEE SOD NOTES BELOW.
- THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANTINGS FOR A PERIOD OF ONE YEAR BEGINNING UPON THE WRITTEN DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT. ANY PLANTS SUBJECT TO REPLACEMENT SHALL BE MADE AT THE END OF THE WARRANTY PERIOD OR AT TIME AS DETERMINED BY THE OWNERS REPRESENTATIVE. ALL PLANTS MUST BE ALIVE AND HEALTHY FOR REVIEW AND APPROVAL BY LOCAL AUTHORITIES AS APPROPRIATE FOR OCCUPANCY PERMIT.
- THE LANDSCAPE CONTRACTOR SHALL UTILIZE ON-SITE TOPSOIL AS AVAILABLE FROM THE CONTRACTOR. ALL IMPORTED TOPSOIL SHALL BE APPROVED BY THE OWNERS REPRESENTATIVE PRIOR TO PLACEMENT.
- EXISTING GRASS TO BE REMOVED, IF PRESENT, AND TOPSOIL TO BE SPREAD SMOOTH AND HAND-RAKED TO REMOVE ALL ROCKS AND DEBRIS LARGER THAN 1 INCH IN DIAMETER PRIOR TO LAYING SOD OR TO BE MULCHED WITH A MINIMUM OF 3 INCHES OF AGED, BROWN HARDWOOD BARK, SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED.
- THE TYPICAL PLANTING SOIL BACKFILL MIX FOR BEDS AND PLANT BACKFILL SHALL CONSIST OF THE FOLLOWING:
  - 2/3 SITE SOIL
  - 1/3 SOIL AMENDMENTS (BY VOLUME AS FOLLOWS)
    - 2 PARTS HUMUS AND OR PEAT
    - 1 PART COARSE RIVER SAND
    - 1 PART STERILIZED COMPOSTED COW MANURE
  - COMMERCIAL FERTILIZER AND LIME AS RECOMMENDED BY THE SOILS TEST REPORT.
  - COMPLETELY BLEND BACKFILL SOIL MIX PRIOR TO PLACEMENT.
- MULCH SHALL BE BROWN HARDWOOD MULCH WITH NO WEED OR OTHER UNPROCESSED ORGANICS.

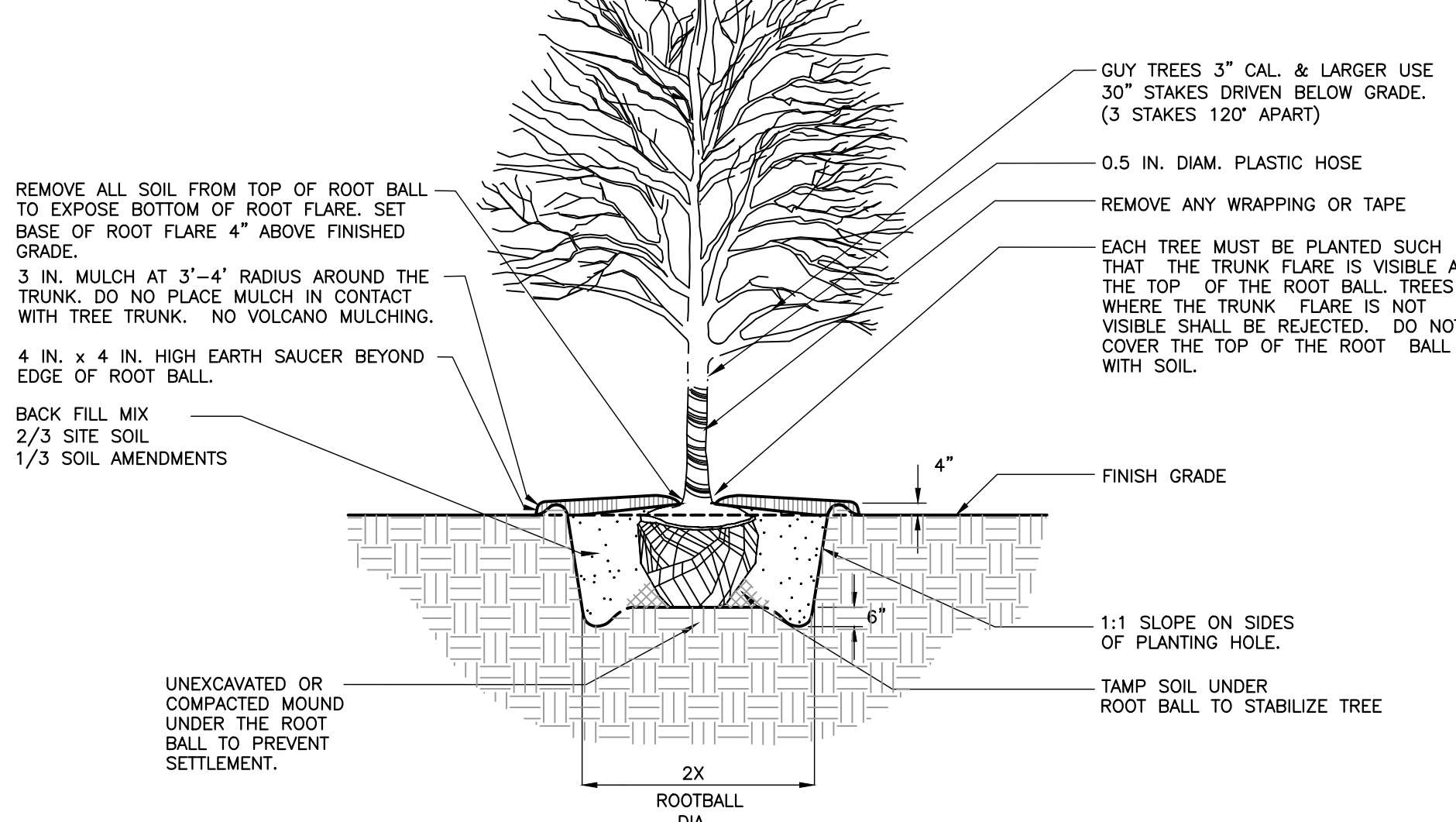
# LANDSCAPE MAINTENANCE

- THE DEVELOPER, ITS SUCCESSOR AND/OR SUBSEQUENT OWNERS AND THEIR AGENTS, SHALL MAINTAIN LANDSCAPING ON THE PROPERTY ON A CONTINUING BASIS FOR THE LIFE OF THE DEVELOPMENT.
- ALL LANDSCAPING IS SUBJECT TO PERIODIC INSPECTION BY THE PLANNING DIRECTOR OR DESIGNEE. THE CITY MAY CAUSE REMOVAL OF ANY DEAD OR DISEASED TREES, PLANTS AND SHRUBS ON PRIVATE PROPERTY WITHIN THE CITY, WHEN THOSE TREES, PLANTS AND SHRUBS CONSTITUTE A HAZARD TO LIFE AND/OR PROPERTY OR HARBOR INSECTS OR DISEASE WHICH CONSTITUTES A POTENTIAL THREAT TO OTHER TREES, PLANTS OR SHRUBS WITHIN THE CITY. IF THE PLANNING DIRECTOR DETERMINES THAT REMOVAL OF ANY DISEASED TREE, PLANTS OR SHRUBS ARE NECESSARY, THE PLANNING OFFICIAL SHALL PROVIDE THE PROPERTY OWNER WRITTEN NOTICE OF THE REQUIRED MAINTENANCE OR REMOVAL.
2. ALL REQUIRED LANDSCAPING SHALL BE PROVIDED WITH A READILY AVAILABLE AND ACCEPTABLE WATER SUPPLY. UNDERGROUND SPRINKLER SYSTEMS ARE ENCOURAGED FOR ALL REQUIRED STREET YARD LANDSCAPING, PARKING LOT LANDSCAPING, LANDSCAPE BUFFER YARDS, AND LANDSCAPE SCREENING.
3. WARRANTY PERIOD - COMPLETED LANDSCAPING SHALL COMPLY WITH THE APPROVED LANDSCAPE PLAN, INCLUDING THE QUANTITIES, LOCATION, SPECIES, AND SIZE OF PLANTS AND OTHER LANDSCAPE MATERIALS, AND THAT SUCH LANDSCAPING WILL REMAIN IN GOOD CONDITION FREE FROM DEFECTS IN MATERIAL AND/OR WORKMANSHIP DURING THE WARRANTY PERIOD.
- 3.1. FOR THE PURPOSE OF THIS SUBSECTION, "WARRANTY PERIOD," MEANS A PERIOD OF ONE YEAR BEGINNING WHEN THE CITY ACCEPTS THE LANDSCAPING AS COMPLETE.
- 3.2. DURING THE WARRANTY PERIOD, DEFECTIVE MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE REPAIRED, CORRECTED, OR REPLACED WITHOUT CHARGE OR COST TO THE OWNER. THE CITY MAY AT ANY TIME DURING THE WARRANTY PERIOD INSPECT, PHOTOGRAPH, OR TELEVISION SUCH LANDSCAPING AND SHALL NOTIFY THE DEVELOPER OF ANY NECESSARY REPAIR, CORRECTION, OR REPLACEMENT.

# KENTUCKY BLUEGRASS SODDING NOTES

- PART 1. GENERAL**  
THIS WORK SHALL INCLUDE ALL SOIL PREPARATION AND THE STORAGE, TRANSPORTATION, PLACING, AND MAINTENANCE OF SOD AT ALL LOCATIONS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT. TEMPORARY STORAGE OF SOD IS PERMITTED; HOWEVER, TAKE CARE TO MAINTAIN THE SOD IN A LIVE, GROWING CONDITION. SOD SHALL BE REJECTED IF IT IS PERMITTED TO DECAY OR DRY OUT TO THE EXTENT THAT, IN THE JUDGMENT OF THE LANDSCAPE ARCHITECT, ITS SURVIVAL IS DOUBTFUL. DISPOSE OF REJECTED SOD AS DIRECTED BY THE LANDSCAPE ARCHITECT AT NO EXPENSE TO THE OWNER. SET SOD BETWEEN MARCH 1 AND OCTOBER 15 AND WHEN THE SOIL IS IN A WORKABLE CONDITION, CONTRACTOR SHALL COORDINATE INSTALLATION OF SOD WITH COMPLETION OF IRRIGATION SYSTEM. THIS WILL INSURE WATERING OF NEW MATERIAL. DO NOT SET SOD OUT OF SEASON UNLESS SOIL CONDITIONS ARE FAVORABLE AND WRITTEN PERMISSION IS OBTAINED FROM THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR THE SCHEDULING, ORDERING, RECEIVING, STORING, AND INSTALLING OF ALL SODDING MATERIALS.
- PART 2. PRODUCTS**  
SOD: KENTUCKY BLUEGRASS; NEW SOD CONSISTING OF LIVE, DENSE, WELL ROOTED GROWTH; WELL SUITED FOR THE INTENDED PURPOSE AND SOIL CONDITIONS; COMPLETELY FREE OF NOXIOUS WEEDS AND GRASSES (QUACK GRASS, JOHNSON GRASS, CANADA THISTLE); AND CONTAINING LESS THAN 5 PLANTS OF OBJECTIONABLE WEEDS PER 100 SQUARE FEET IF NURSERY GROWN OR 10 SUCH PLANTS IF FIELD GROWN
- FERTILIZER: COMMERCIALLY MANUFACTURED, GRADE 10-10-10; FURNISHED IN STANDARD CONTAINERS THAT ARE CLEARLY MARKED WITH THE NAME, WEIGHT, AND GUARANTEED ANALYSIS OF THE CONTENTS AND THAT ENSURE PROPER PROTECTION IN TRANSPORTATION AND HANDLING; AND IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL FERTILIZER LAWS AGRICULTURAL LIMESTONE: CONTAINING A MINIMUM OF 85 PERCENT CALCIUM CARBONATE AND MAGNESIUM CARBONATE COMBINED, 85 PERCENT OF WHICH PASSES A NO. 10 MESH SIEVE.
- PART 3. EXECUTION**  
BEFORE BEGINNING SODDING OPERATIONS IN ANY AREA, COMPLETE THE PLACING OF TOPSOIL, FINAL GRADING, AND REMOVAL OF ANY DEBRIS. HAVE THE WORK APPROVED BY THE LANDSCAPE ARCHITECT. A MINIMUM OF 4 INCHES OF GOOD, CLEAN TOPSOIL SHALL BE SPREAD OVER THE CONSTRUCTION AREA. SCARIFY EACH AREA TO BE SODDED A MINIMUM OF 2 INCHES.
- APPLY FERTILIZER AND AGRICULTURAL LIMESTONE UNIFORMLY OVER THE SOD BED AT THE RATES SHOWN BELOW. IMMEDIATELY PRIOR TO PLACING SOD, WATER THE SOD BED UNTIL IT IS SATURATED TO A DEPTH OF 1 INCH, AND KEEP IT MOIST UNTIL THE SOD IS PLACED.
- A. FERTILIZER: 15 POUNDS PER 1,000 SQUARE FEET OF 10-10-10  
B. AGRICULTURAL LIMESTONE: 40 POUNDS PER 1,000 SQUARE FEET
- PLACE SOD AS SOON AS PRACTICAL AFTER ITS REMOVAL FROM POINT OF ORIGIN. KEEP IT MOIST WHILE DISPLACED. PLACE SOD BY HAND SO THAT THE EDGES ARE IN CLOSE CONTACT AND IN A POSITION TO BREAK JOINTS WITH THE LONG DIMENSION PERPENDICULAR TO THE SLOPE. FIT AND POUND THE SOD INTO PLACE WITH A 10 INCHES X 10 INCHES WOOD TAMP OR OTHER SIMILAR IMPLEMENTS. IMMEDIATELY AFTER PLACING THE SOD, THOROUGHLY WET AND ROLL IT. TWO WEEKS AFTER THE SOD IS INSTALLED, TOP DRESS AND THOROUGHLY WATER IT. TOP DRESSING SHALL CONSIST OF THE FOLLOWING:
- A. 1/2 TO 1 POUND; 38 PERCENT UREA FORMALDEHYDE PER 1,000 SQUARE FEET  
B. 20 POUNDS; 6-12-12 PER 1,000 SQUARE FEET
- NO EQUIPMENT, MATERIAL STORAGE, CONSTRUCTION TRAFFIC, ETC., WILL BE PERMITTED ON NEWLY SODDED AREAS. DISPOSE OF ALL SURPLUS MATERIAL AS DIRECTED BY THE OWNER. THE OWNER WILL REVIEW THE SOD FOR ACCEPTANCE 30 DAYS AFTER INSTALLATION, AT WHICH TIME THE MAINTENANCE PERIOD WILL BEGIN AS STATED IN THESE SPECIFICATIONS. THIS ACCEPTANCE BY THE OWNER IS FOR THE PURPOSES OF PAYMENT ONLY.
- INSPECTIONS**  
A. THE LANDSCAPE ARCHITECT SHALL INSPECT THE SOD WITHIN 30 DAYS AFTER INSTALLATION AND DETERMINE IF IT IS ACCEPTABLE.
- GUARANTEES**  
A. ESTABLISH AN ACCEPTABLE GROWTH OF THE SPECIFIED SOD ON ALL AREAS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT. AN AREA IS CONSIDERED ACCEPTABLE IF THE MAJORITY OF EACH PIECE OF SOD IS ALIVE AND HEALTHY AND GENERALLY FREE FROM WEEDS, INSECT, AND DISEASE.

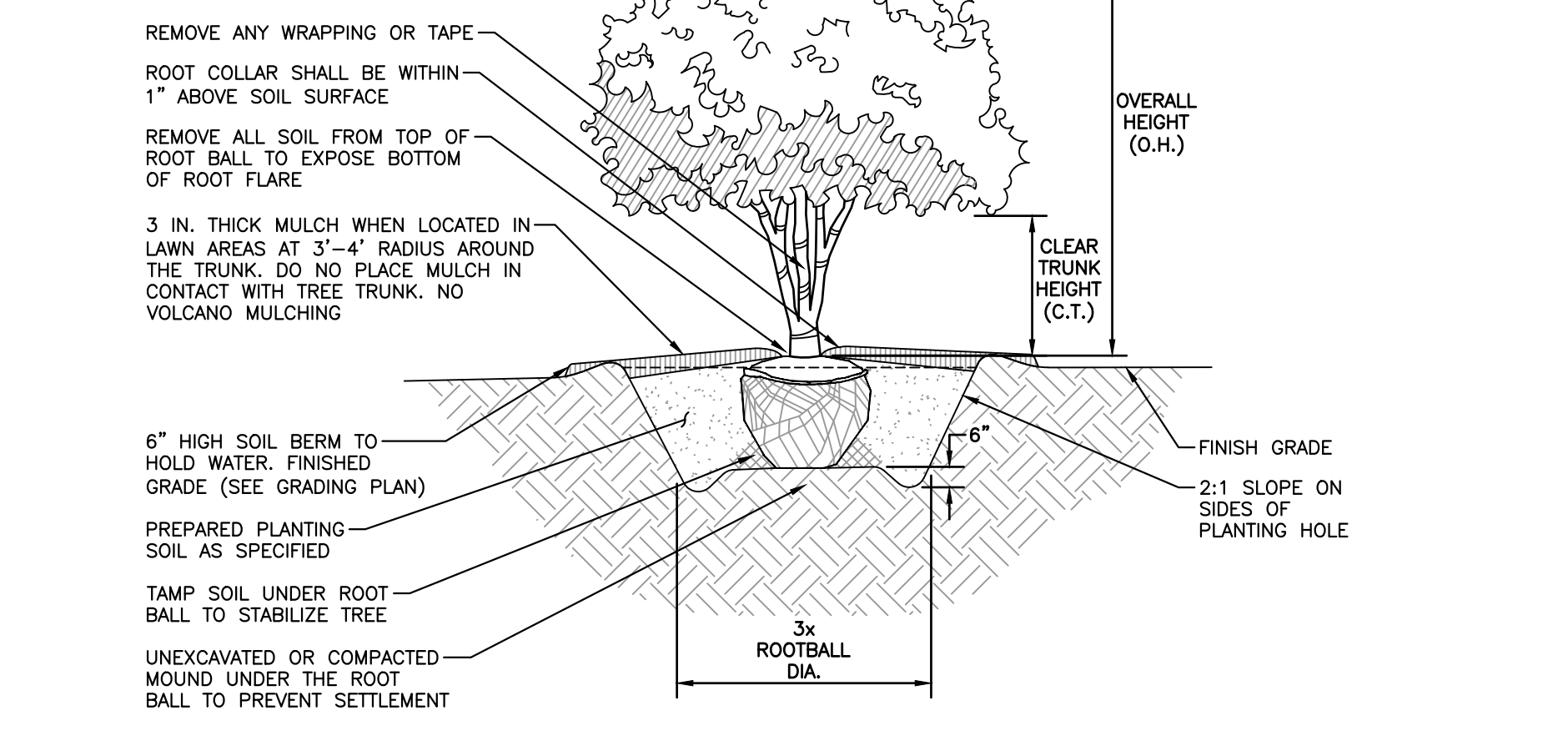
DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.



- NOTES:**
- TREES ARE NOT TO BE STAKED.
  - PROVIDE POSITIVE DRAINAGE UNDER ALL CIRCUMSTANCES. DRAINAGE SHOULD BE FROM CENTER OF ROOT BALL TO PERIMETER OF ROOT BALL. DO NOT ALLOW PONDING OF WATER UNDER ROOTBALL.
  - REMOVE TOP HALF OF WIRE BASKET AFTER PLACING ROOTBALL IN PLANT PIT.
  - REMOVE ROPE TIES & TOP 1/3 OF BURLAP FROM ROOT BALL AFTER PLANTING.
  - POLYPROPYLENE STRAPS MAY BE SUBSTITUTED IN LIEU OF WIRES, ARBORTIC OR EQUIVALENT.
  - SEE PLANTING SCHEDULE AND PLANTING NOTES FOR ADDITIONAL INFORMATION/REQUIREMENTS.

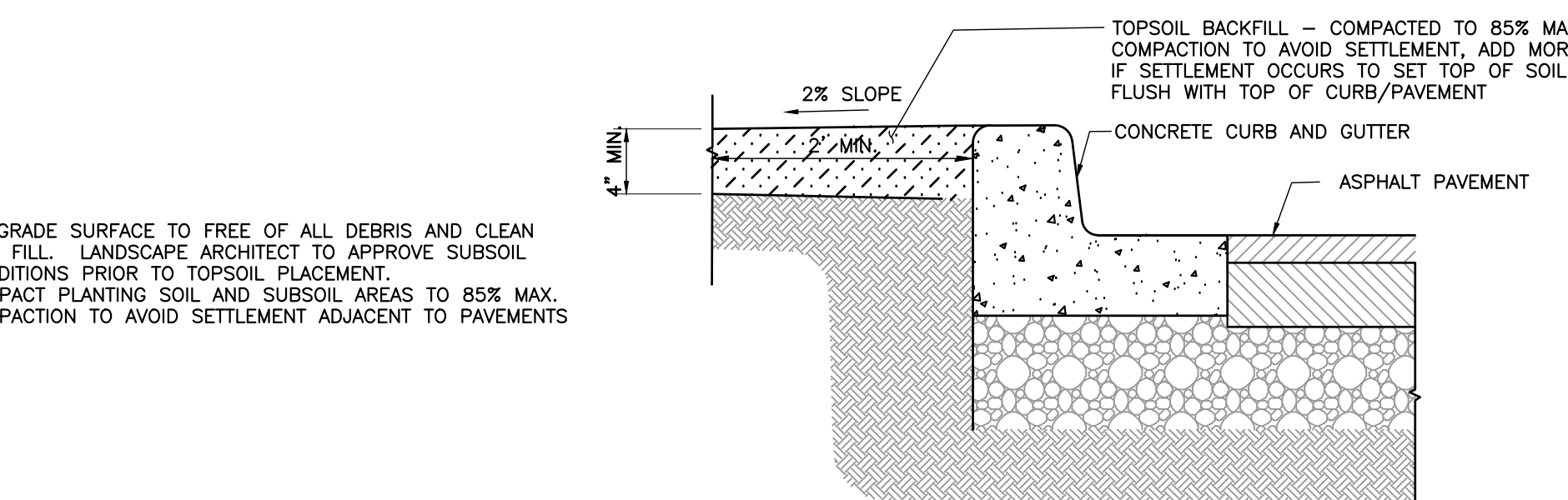
1 DECIDUOUS TREE PLANTING DETAIL  
NOT TO SCALE

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN. TREE PRUNING SHALL BE CONDUCTED AS NEEDED PER SPECIFICATIONS



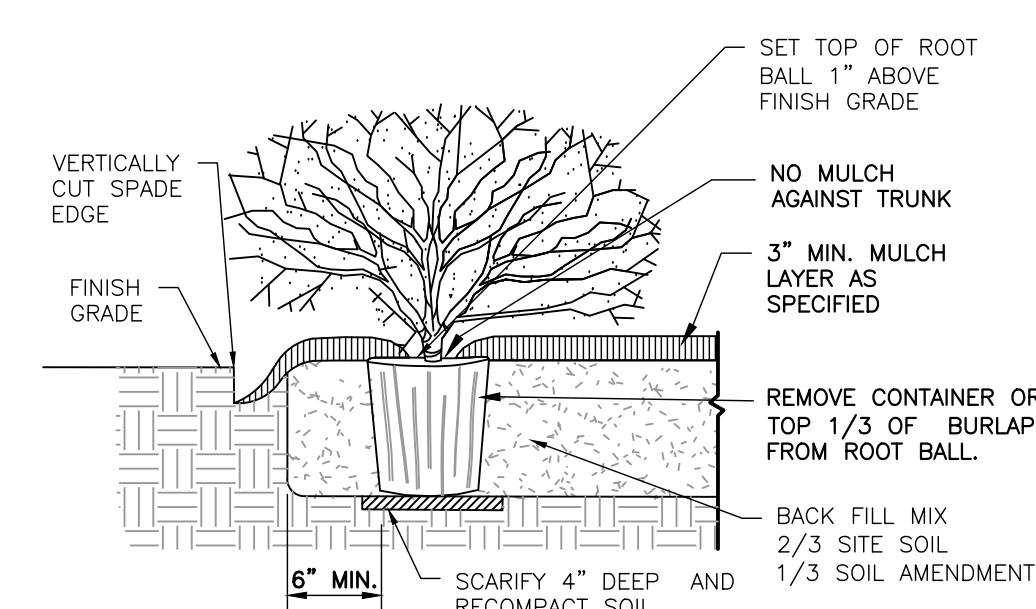
- NOTES:**
- TREES SHALL BE STAKED AND GUYED AS DETAILED AND SPECIFIED ONLY IF THE TREE CANNOT STAND ON ITS OWN.
  - PROVIDE POSITIVE DRAINAGE UNDER ALL CIRCUMSTANCES. DRAINAGE SHOULD BE FROM CENTER OF ROOT BALL TO PERIMETER OF ROOT BALL. DO NOT ALLOW PONDING OF WATER UNDER ROOTBALL.
  - SET TREE AT ORIGINAL DEPTH. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL. NO SYNTHETIC BURLAP WILL BE ACCEPTED.
  - SEE LANDSCAPE PLANTING NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
  - BRANCHING HEIGHT PER PLANTING NOTES AND SPECIFICATIONS.
  - SEE PLANTING SCHEDULE AND PLANTING NOTES FOR ADDITIONAL INFORMATION/REQUIREMENTS.

2 MULTI-TRUNK TREE PLANTING DETAIL  
NOT TO SCALE



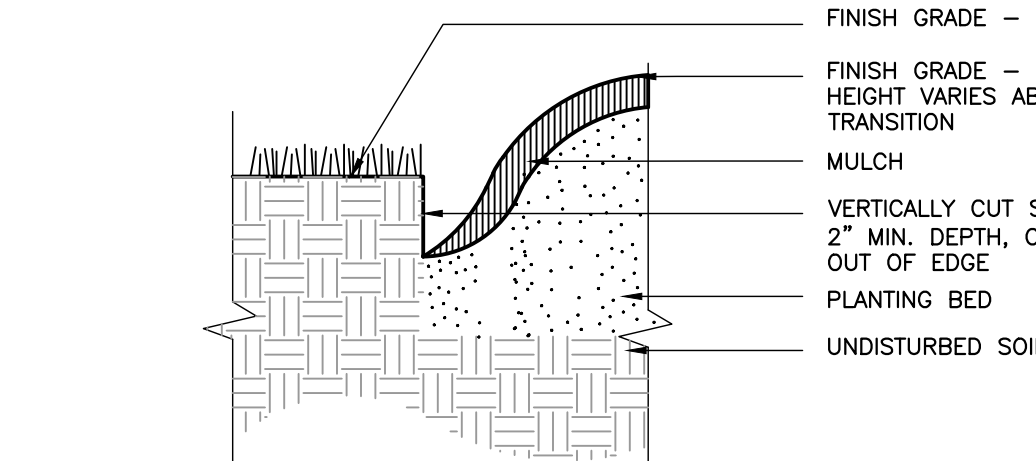
- NOTES:**
- SUBGRADE SURFACE TO BE FREE OF ALL DEBRIS AND CLEAN SOIL FILL. LANDSCAPE ARCHITECT TO APPROVE SUBSOIL CONDITIONS PRIOR TO TOPSOIL PLACEMENT.
  - COMPACT PLANTING SOIL AND SUBSOIL AREAS TO 85% MAX. COMPACTION TO AVOID SETTLEMENT ADJACENT TO PAVEMENTS

3 TOPSOIL BACKFILL DETAIL  
NOT TO SCALE



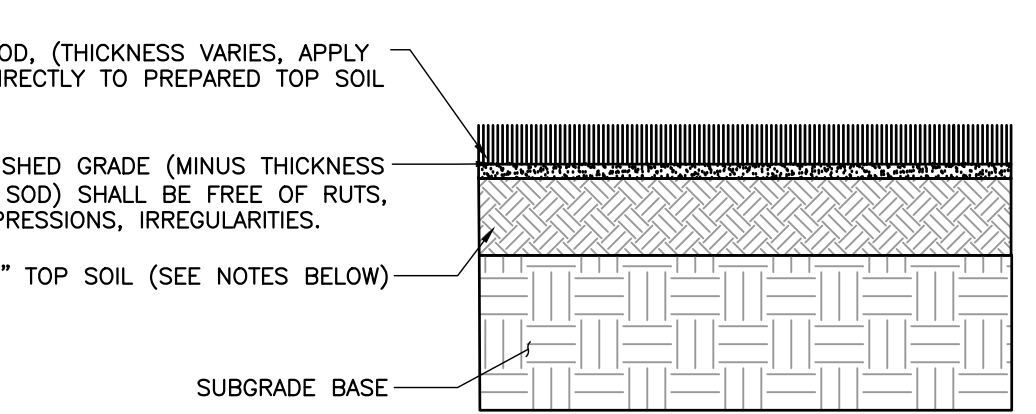
- NOTES:**
- SEE PLANTING SCHEDULE AND PLANTING NOTES FOR ADDITIONAL INFORMATION/REQUIREMENTS.
  - LIMIT AMOUNT OF PRUNING TO ONLY DEAD OR DAMAGED LIMBS. RETAIN THE NATURAL SHAPE OF SHRUB. IF MORE THAN 1/5 OF TOTAL SHRUB FOLIAGE IS PRUNED, PLANT MAY BE REJECTED.

4 SHRUB PLANTING DETAIL  
NOT TO SCALE



- NOTES:**
- INSTALL BED EDGE WHEN MULCHED AREAS ADJUT LAWN AREAS UNLESS SPECIFIED FOR STEEL EDGING. DO NOT INSTALL UNTIL LAWN IS ESTABLISHED AND SOIL IS FIRM. RE-MULCH EDGE IF SOIL GETS ON PREVIOUSLY INSTALLED MULCH DURING EDGE INSTALLATION.

5 PLANTING BED EDGE DETAIL  
NOT TO SCALE

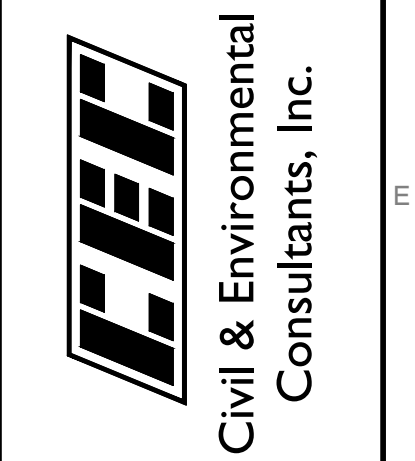


- NOTES:**
- MINIMUM TOPSOIL DEPTH IS 4 INCHES.
  - TOPSOIL SHOULD HAVE A GOOD HUMUS CONTENT. THIS CAN BE 20 TONS OF COMPOSTED MANURE PER ACRE OR 170 BALES OF PEAT PER ACRE.
  - TOPSOIL WITH A PH OF 6 OR LESS WILL NEED A LIME AMENDMENT. EVENLY APPLY HYDRATED LIME OR GROUND LIMESTONE TO TOP SOIL UNTIL PH IS ADJUSTED TO BETWEEN 6-7. PH BELOW 5.5 OR ABOVE 7.5 IS UNACCEPTABLE FOR LAWNS.
  - 650 LBS OF SLOW RELEASE WELL-BALANCED FERTILIZER 10-10-10 PER ACRE SHOULD BE HARROWED INTO THE TOPSOIL PRIOR TO SEEDING.
  - SODDING IS BEST IN THE LATE SUMMER-EARLY AUTUMN. A HARROW MAY BE USED TO OBTAIN AN EVEN SURFACE THAT IS FIRM. THE SEED MAY BE MECHANICALLY SPREAD INTO THE SURFACE.
  - CONTRACTOR IS RESPONSIBLE FOR ENSURING SOD IS WATERED DURING ESTABLISHMENT.

6 SOD PLANTING  
NOT TO SCALE

NO.	DATE	REVISION RECORD	DESCRIPTION

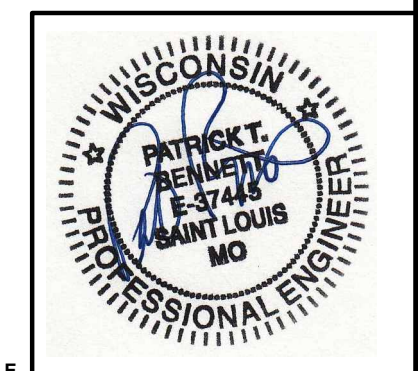
700 Cherrington Parkway  
Moon Township, PA 15108  
Ph. 412.429.2324 · 800.365.2324  
www.cecinco.com



McDONALD'S RESTAURANT  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081



LANDSCAPE DETAILS	
DATE:	4/20/2026 [DRAWN BY: AZMI]
DWG SCALE:	1"=20'
PROJECT NO.:	357-510
CHECKED BY:	SRB
APPROVED BY:	DRAFT

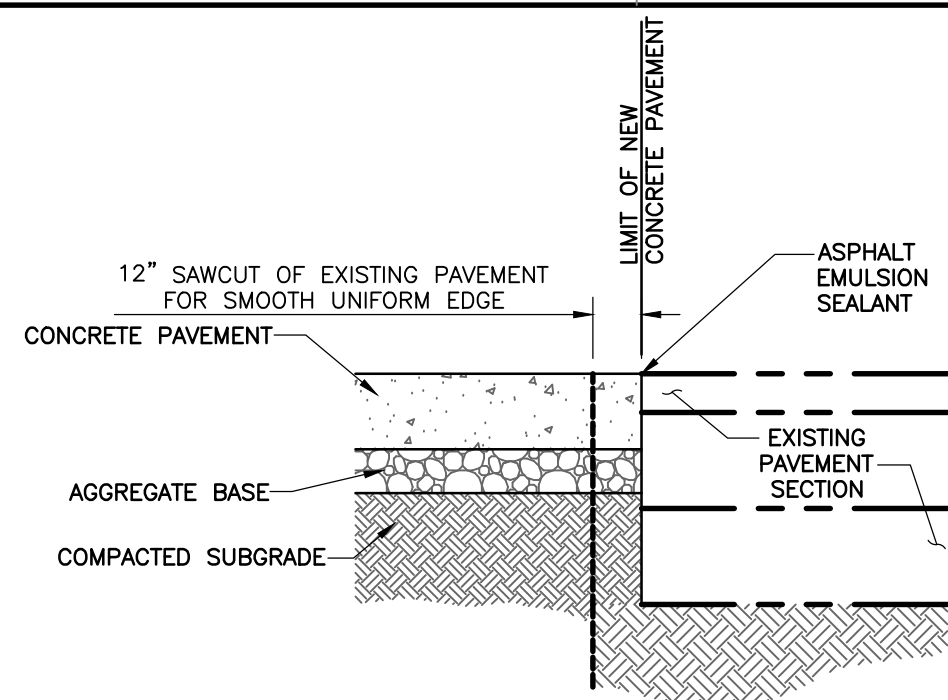


DRAWING NO.: **C700**  
SHEET OF 24

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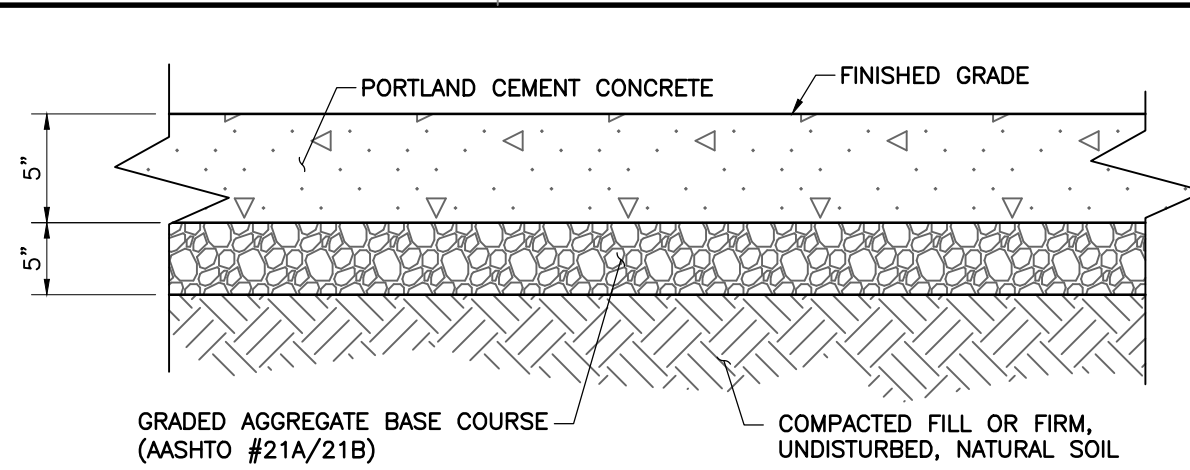


\*HAND SIGNATURE ON FILE



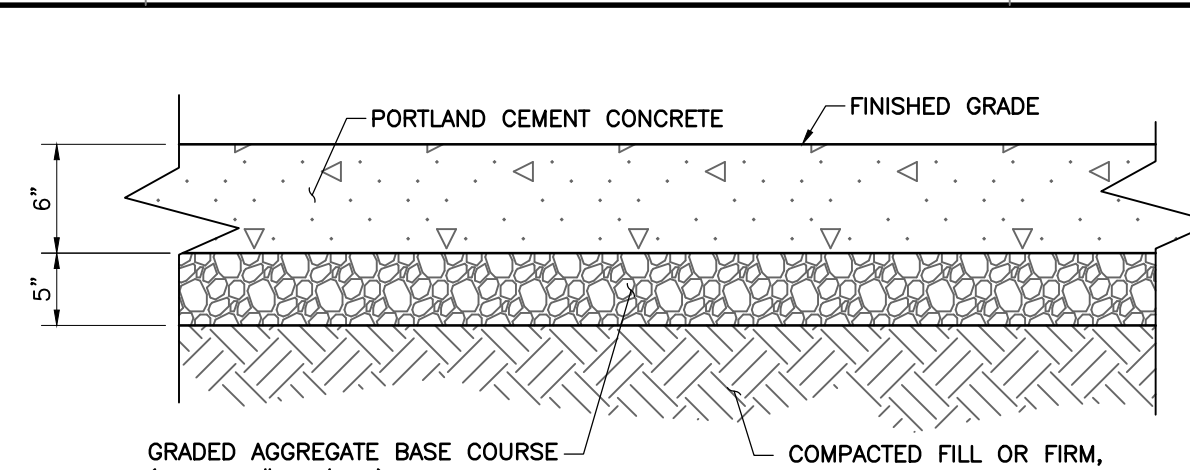
- NOTES:**
- REFER TO GEOTECHNICAL REPORT BY ECS SOUTHEAST, LLC DATED DECEMBER 20, 2024 FOR FURTHER SPECIFICATIONS AND/OR RECOMMENDATIONS.
  - PROVIDE TACK COAT ALONG SAWCUT TO BIND EXISTING ASPHALT PAVEMENT TO NEW PAVEMENT. FOR AREAS WITH PATCHING AND OVERLAY, PROVIDE TACK COAT TO BIND EXISTING ASPHALT PAVEMENT WITH NEW PAVEMENT.

**DETAIL #01  
PAVEMENT SAWCUT**  
N.T.S.



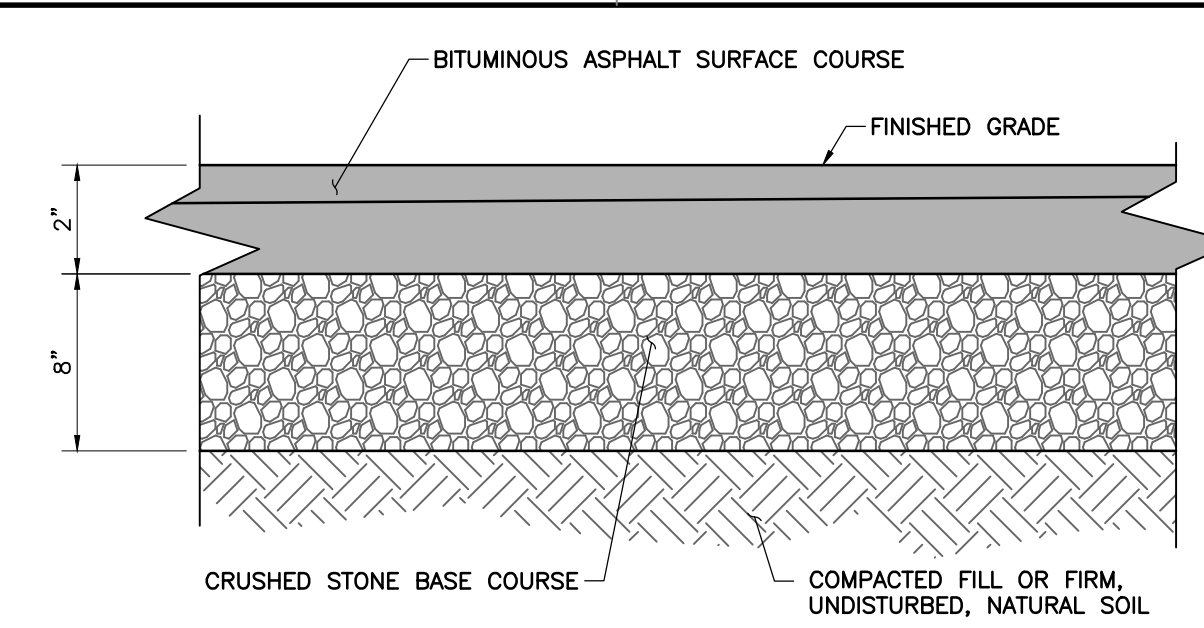
- NOTES:**
- SEE CHART IN ASPHALT PAVEMENT DETAIL FOR THICKNESSES.
  - EXPANSION AND CONTROL JOINTS SHALL BE PER JOINT DETAILS
  - PAVEMENT THICKNESS SHOWN PER GEOTECHNICAL REPORT, REFER TO THIS DOCUMENT FOR FURTHER SPECIFICATIONS AND/OR RECOMMENDATIONS. (SEE GRADING NOTES ON C001)

**DETAIL #02A  
LIGHT DUTY CONCRETE PAVEMENT**  
N.T.S.



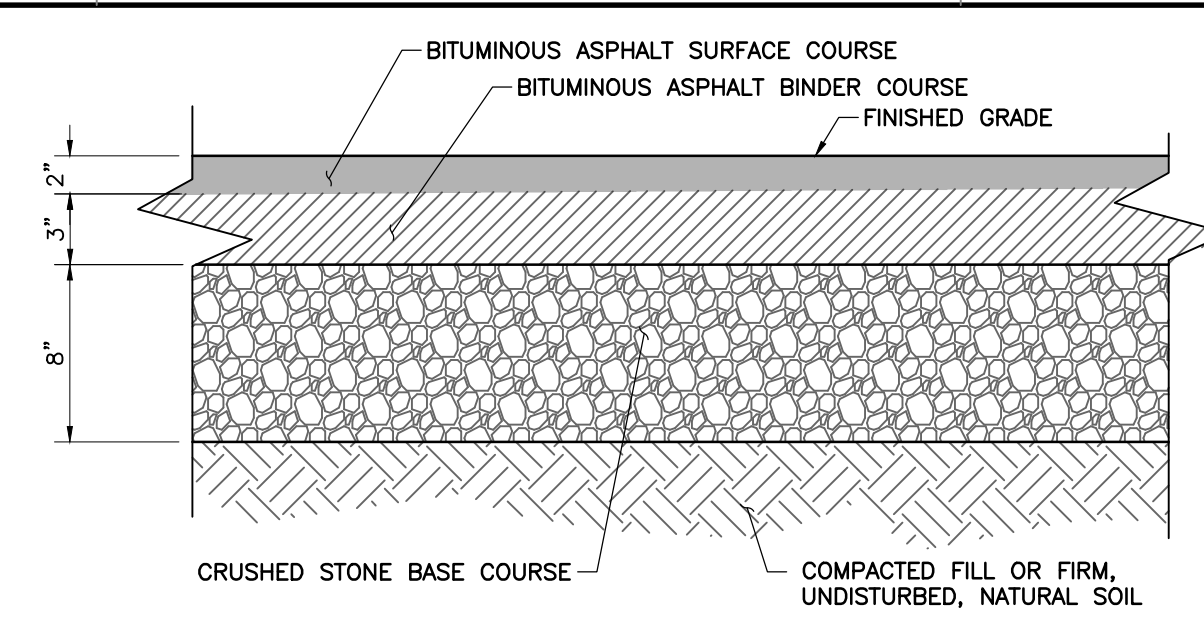
- NOTES:**
- SEE CHART IN ASPHALT PAVEMENT DETAIL FOR THICKNESSES.
  - EXPANSION AND CONTROL JOINTS SHALL BE PER JOINT DETAILS
  - PAVEMENT THICKNESS SHOWN PER GEOTECHNICAL REPORT, REFER TO THIS DOCUMENT FOR FURTHER SPECIFICATIONS AND/OR RECOMMENDATIONS. (SEE GRADING NOTES ON C001)

**DETAIL #02B  
HEAVY DUTY CONCRETE PAVEMENT**  
N.T.S.



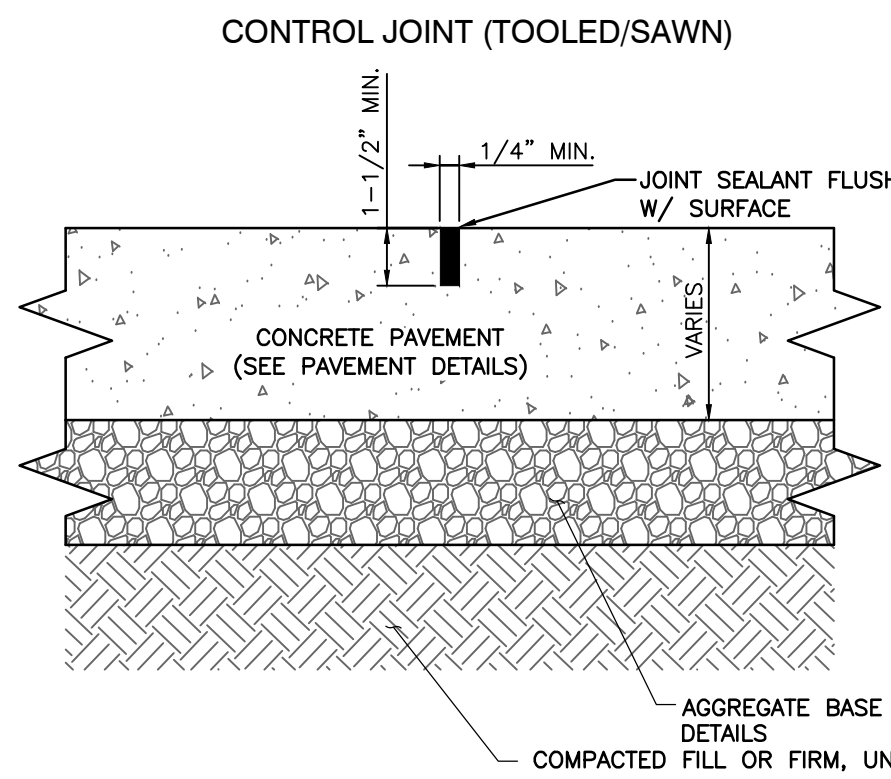
- NOTES:**
- PAVEMENT THICKNESS SHOWN PER GEOTECHNICAL REPORT, REFER TO THIS DOCUMENT FOR FURTHER SPECIFICATIONS AND/OR RECOMMENDATIONS. (SEE GRADING NOTES ON C001)

**DETAIL #03A  
ASPHALT SPIRE PAVEMENT**  
N.T.S.



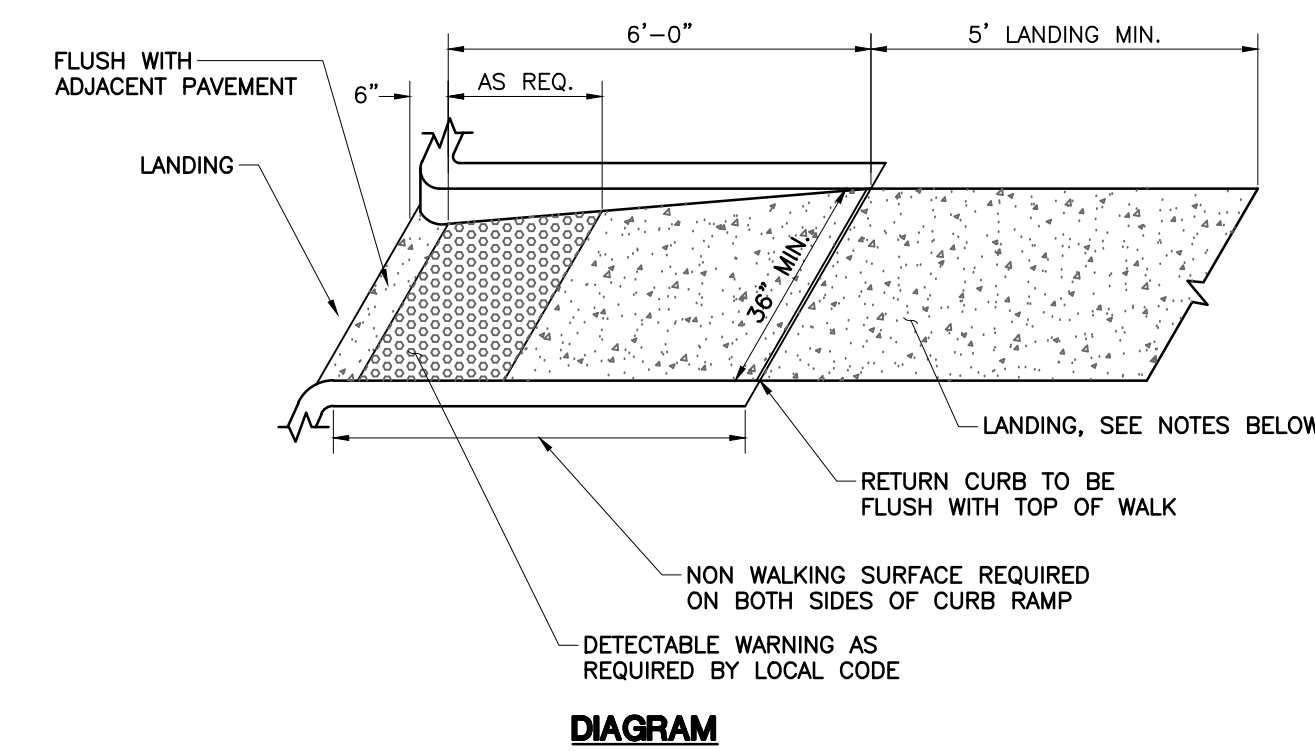
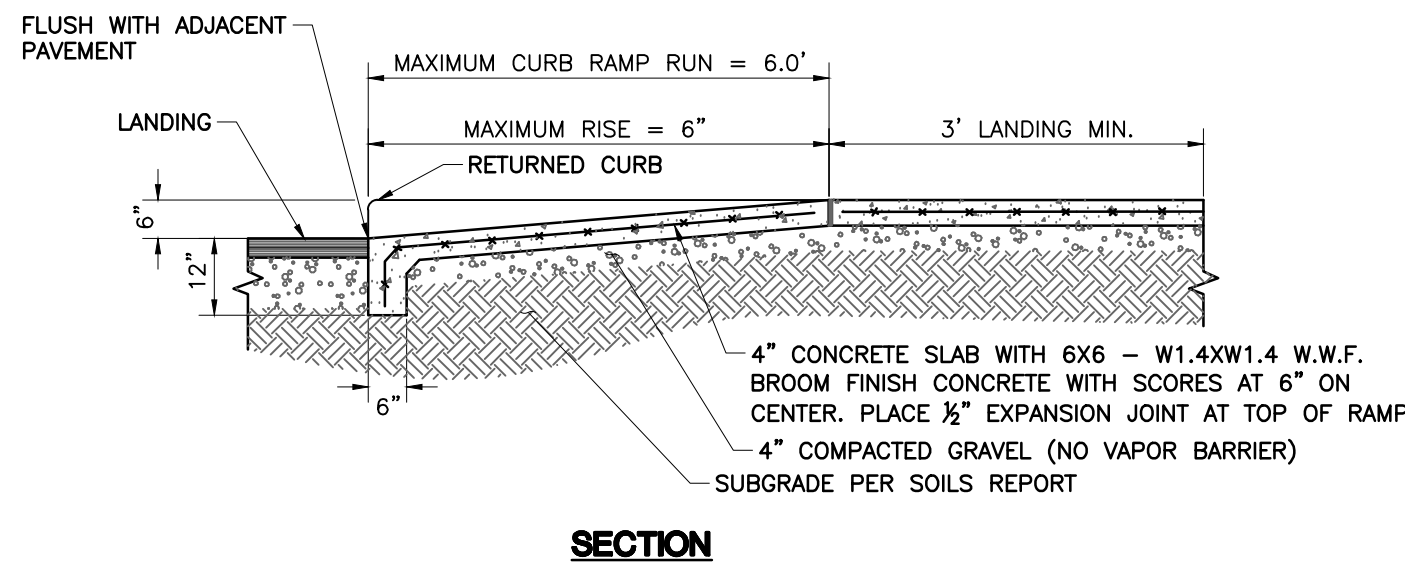
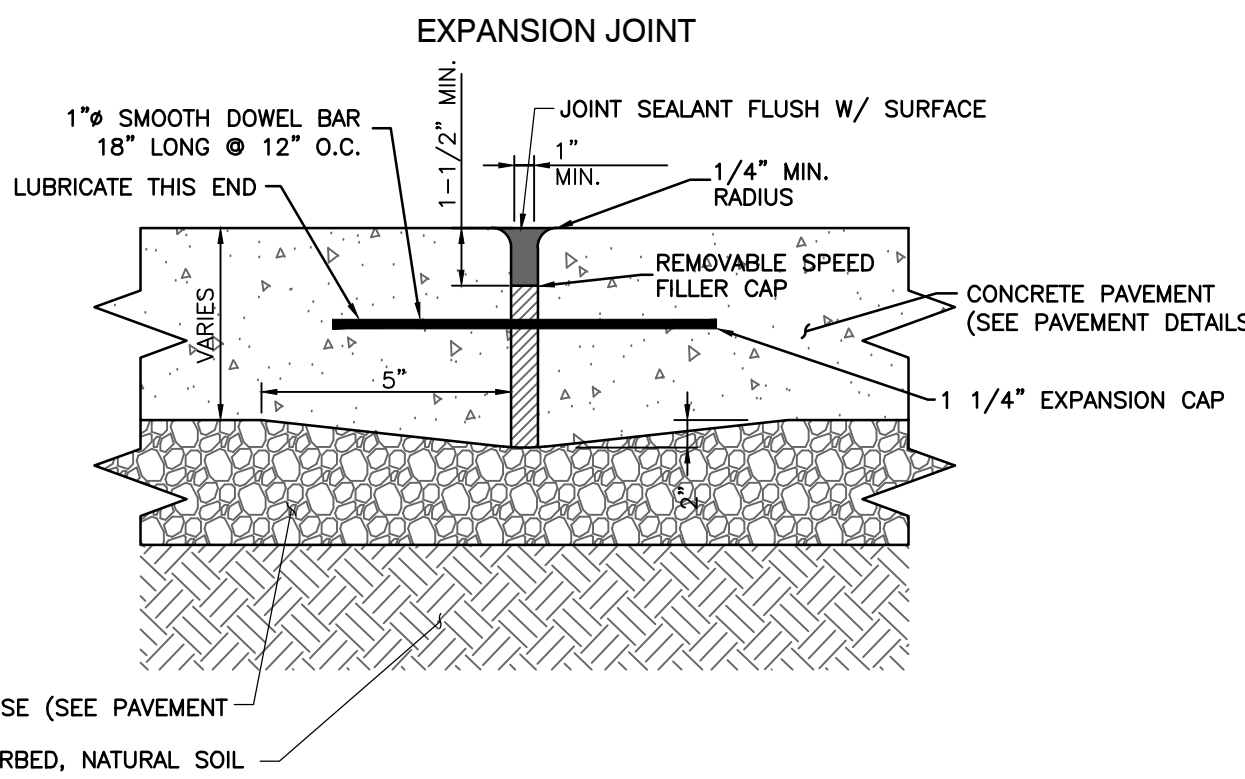
- NOTES:**
- PAVEMENT THICKNESS SHOWN PER GEOTECHNICAL REPORT, REFER TO THIS DOCUMENT FOR FURTHER SPECIFICATIONS AND/OR RECOMMENDATIONS. (SEE GRADING NOTES ON C001)

**DETAIL #03B  
HEAVY DUTY ASPHALT PAVEMENT**  
N.T.S.



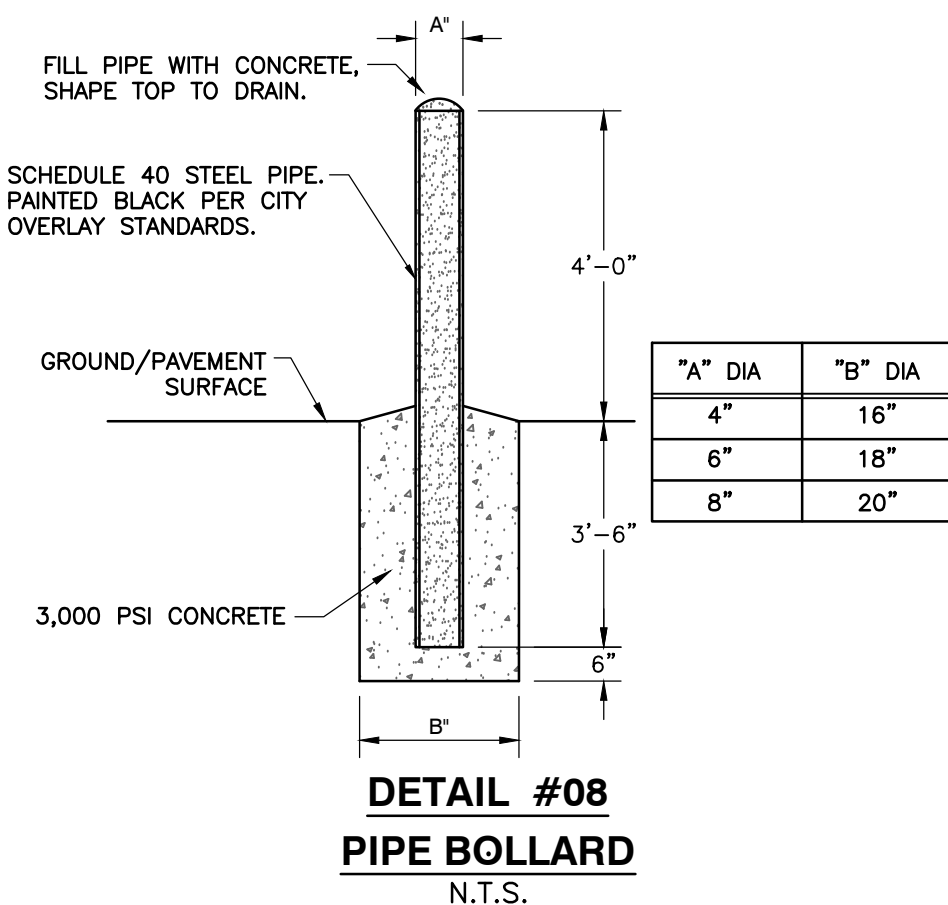
- NOTES:**
- MAXIMUM JOINT SPACING SHALL BE 15' CENTER TO CENTER.
  - EXPANSION JOINTS ARE REQUIRED AT ALL LOCATIONS WHERE CHANGE OF MATERIAL OR THICKNESSES OCCUR OR ABUTTING STRUCTURES.

**DETAIL #04  
CONCRETE JOINTS**  
N.T.S.

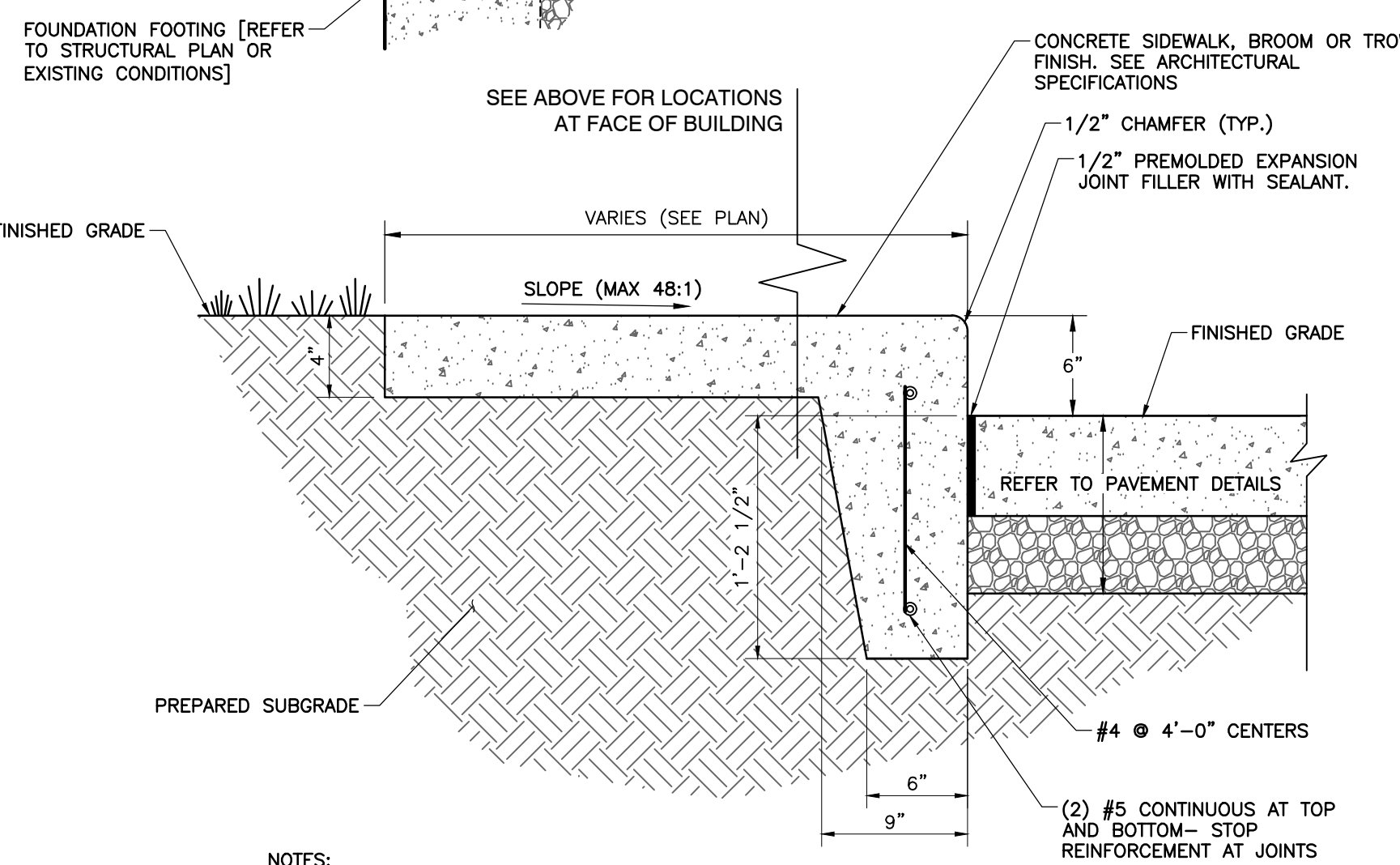
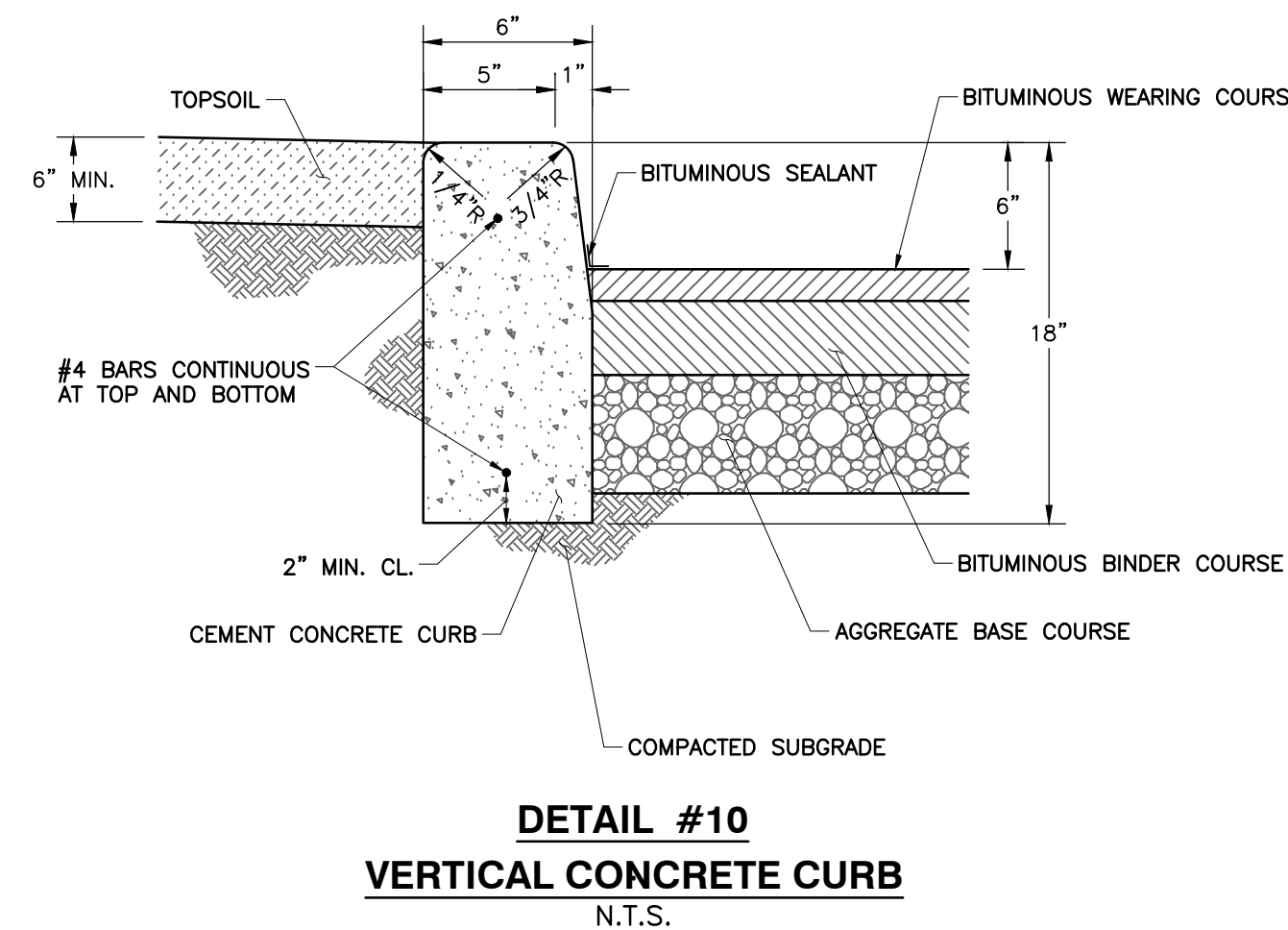
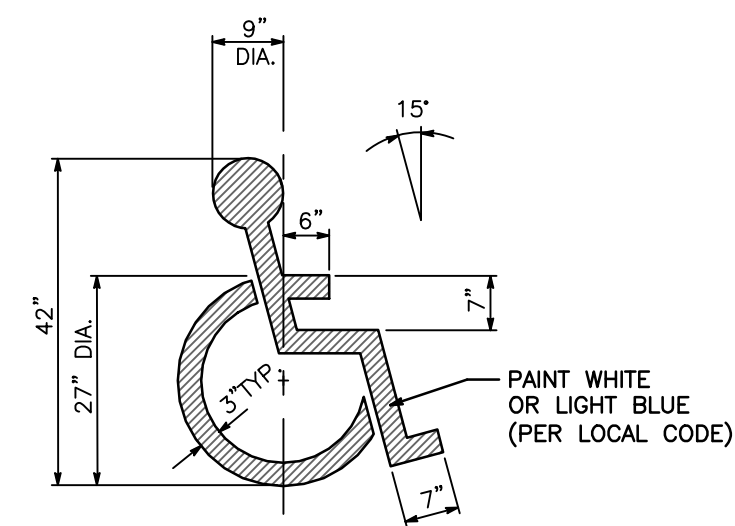


- NOTES:**
- LANDINGS SHALL BE LEVEL (LESS THAN 2% SLOPE IN ALL DIRECTIONS) AND PROVIDED AT THE TOP AND BOTTOM OF ALL ACCESSIBLE RAMPS.
  - LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.
  - LANDING CLEAR LENGTH SHALL BE 5' LONG MINIMUM.
  - LANDINGS THAT REQUIRE A CHANGE IN DIRECTION BETWEEN RAMP RUNS SHALL HAVE A CLEAR LANDING 60" MINIMUM BY 60" MINIMUM.

**DETAIL #07  
ACCESSIBLE CURB RAMP**  
N.T.S.

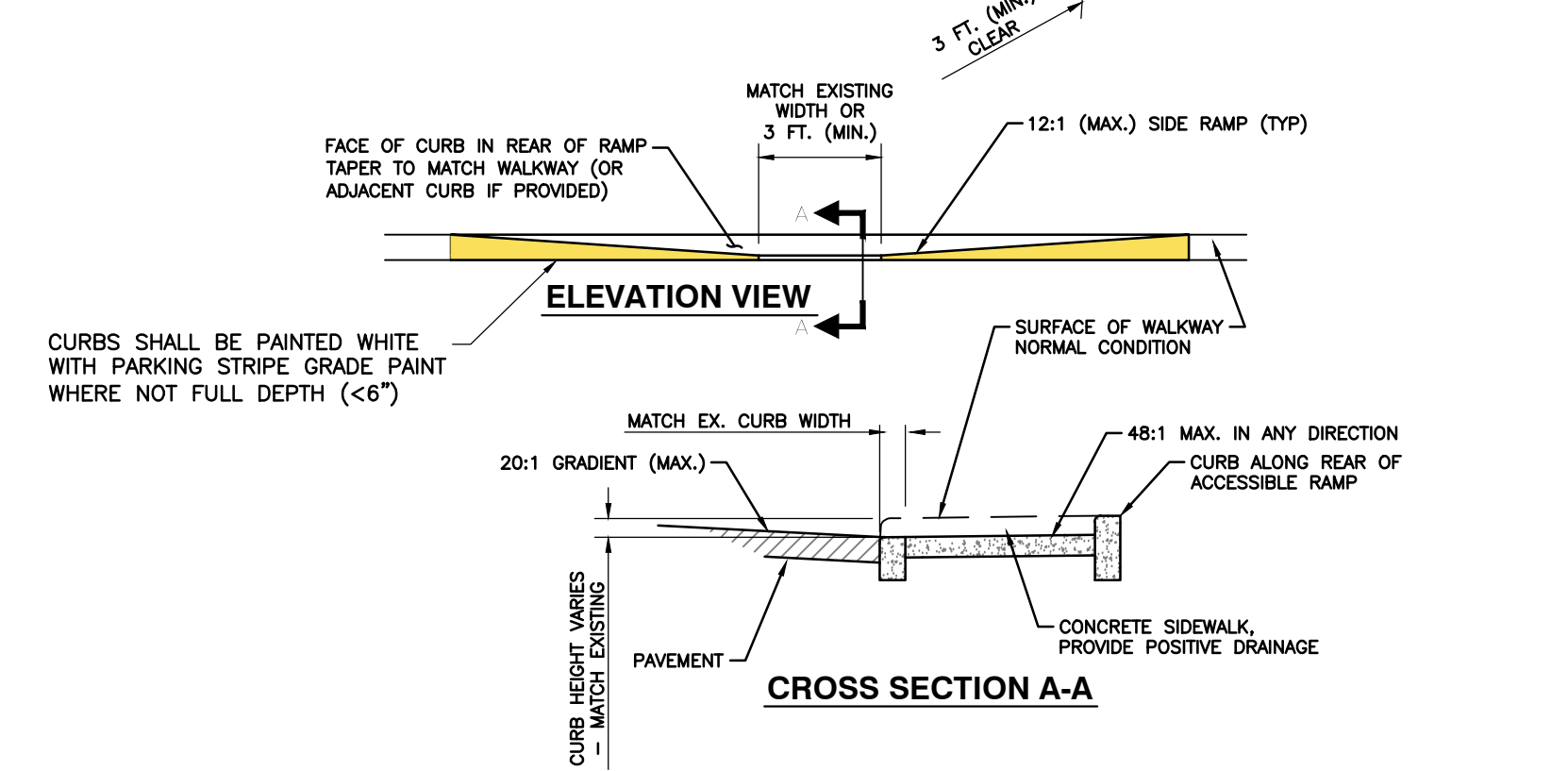
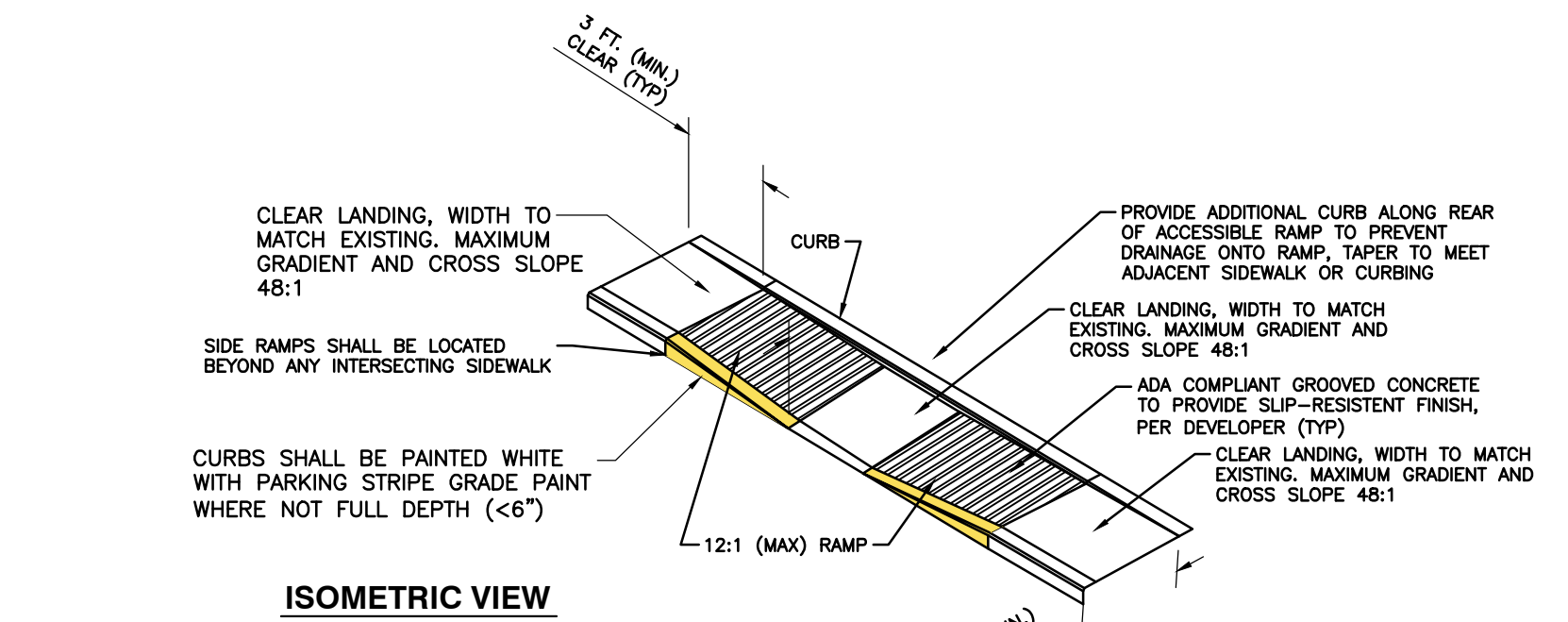


**DETAIL #09  
ACCESSIBLE PARKING SYMBOL**  
N.T.S.



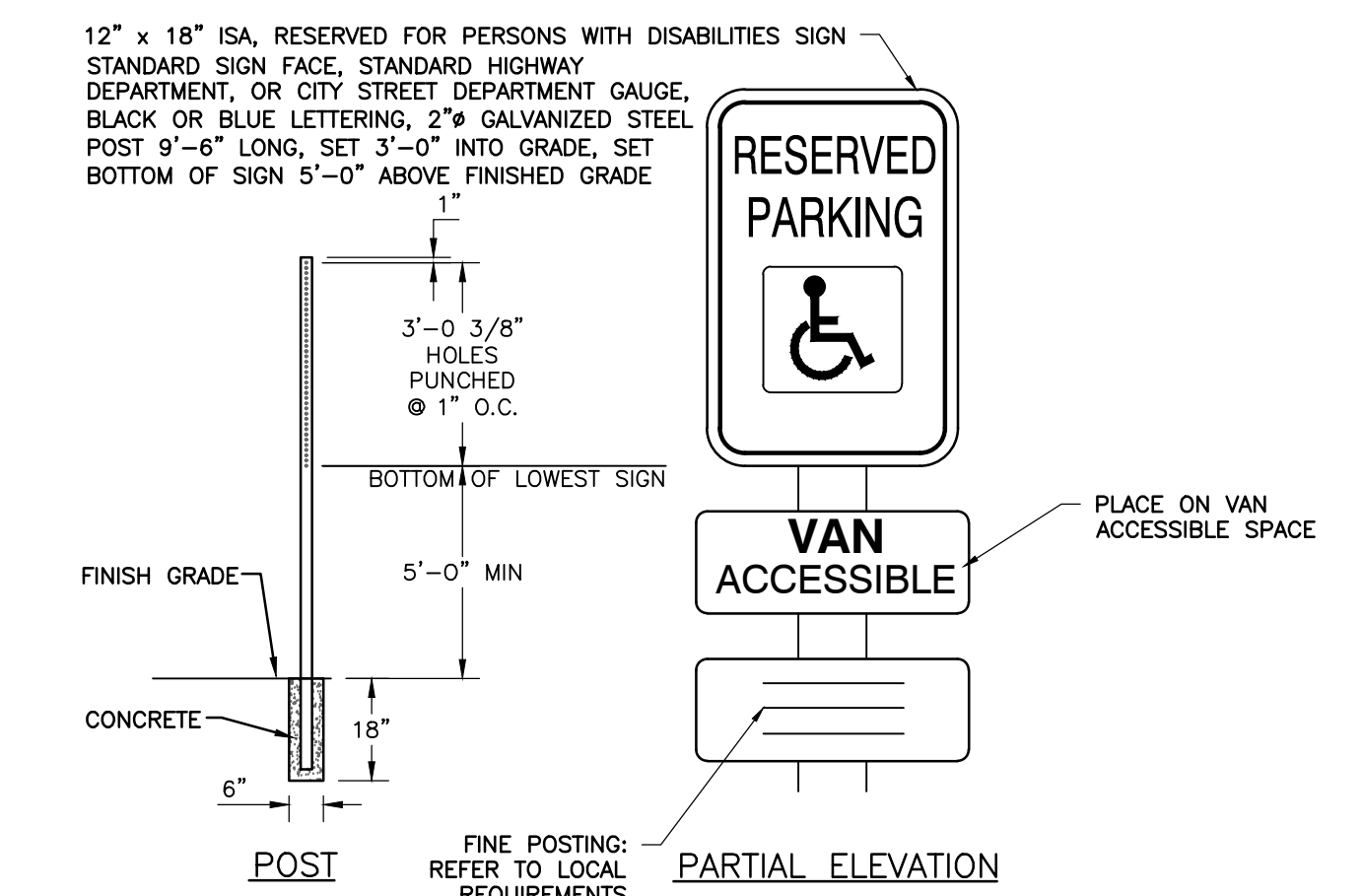
- NOTES:**
- PROVIDE 1/2" PREMOLDED EXPANSION JOINT @ 25' ON CENTER.
  - PROVIDE TOOLED CONTRACTION JOINTS AT 5' ON CENTER.

**DETAIL #05  
COMBINATION CONCRETE CURB - SIDEWALK**  
N.T.S.



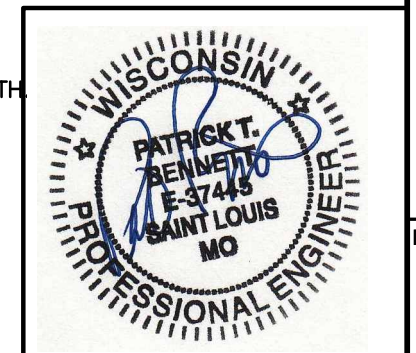
- NOTES:**
- ACCESSIBLE SPACE / LOADING AREA: MAXIMUM 48:1 SLOPE IN ANY DIRECTION.
  - RAMP & PAVEMENT TRANSITION TO BE COMPLETELY FLUSH, NO LIP.
  - WHEN RAMP OCCURS ON RADII, MINIMUM CLEAR LANDING WIDTH MUST BE MAINTAINED ON SHORTEST SIDE ALONG CURVE.
  - CONSTRUCT PER A.D.A. & LOCAL STANDARDS.

**DETAIL #06  
ADA DEPRESSED CURB ACCESSIBLE RAMP**  
N.T.S.



- NOTE:**
- SIGN MAY BE AFFIXED TO WALL SURFACE
  - SIGN MUST NOT PROTRUDE MORE THAN 4" (IF WALL MOUNTED) OR 12" IF POST MOUNTED HORIZONTALLY INTO PEDESTRIAN PATH.

**DETAIL #11  
ACCESSIBLE PARKING SIGN**  
N.T.S.



NO.	DATE	REVISION RECORD	DESCRIPTION

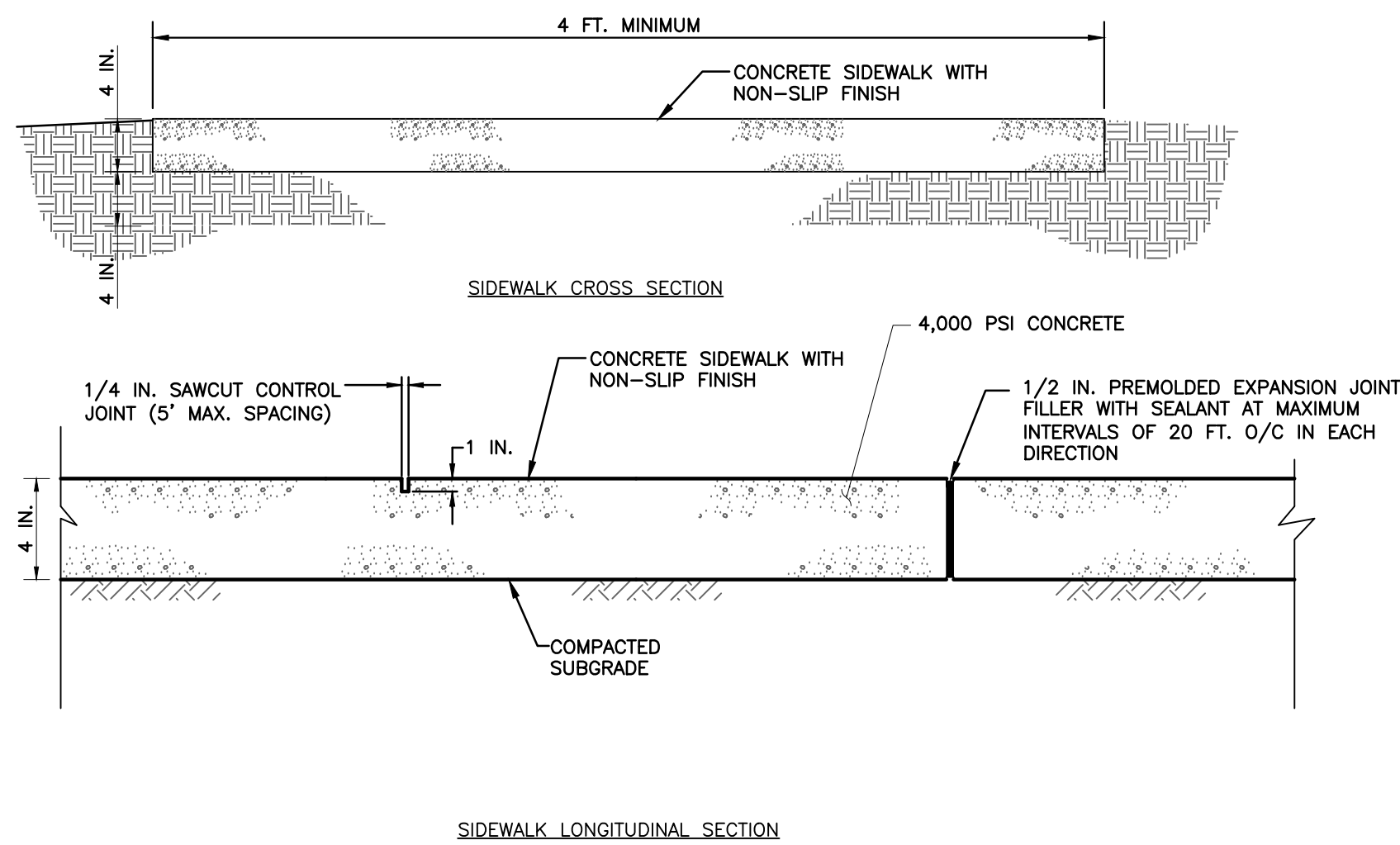
700 Cherrington Parkway  
Moon Township, PA 15108  
Ph. 412.429.2324 · 800.365.2324  
www.cecinc.com



McDONALD'S RESTAURANT  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081



CONSTRUCTION DETAILS	
DATE:	04/20/2026 [DRAWN BY: JTC]
DWG SCALE:	1"=20' [CHECKED BY: JCW]
PROJECT NO.:	387-510
APPROVED BY:	DRAFT

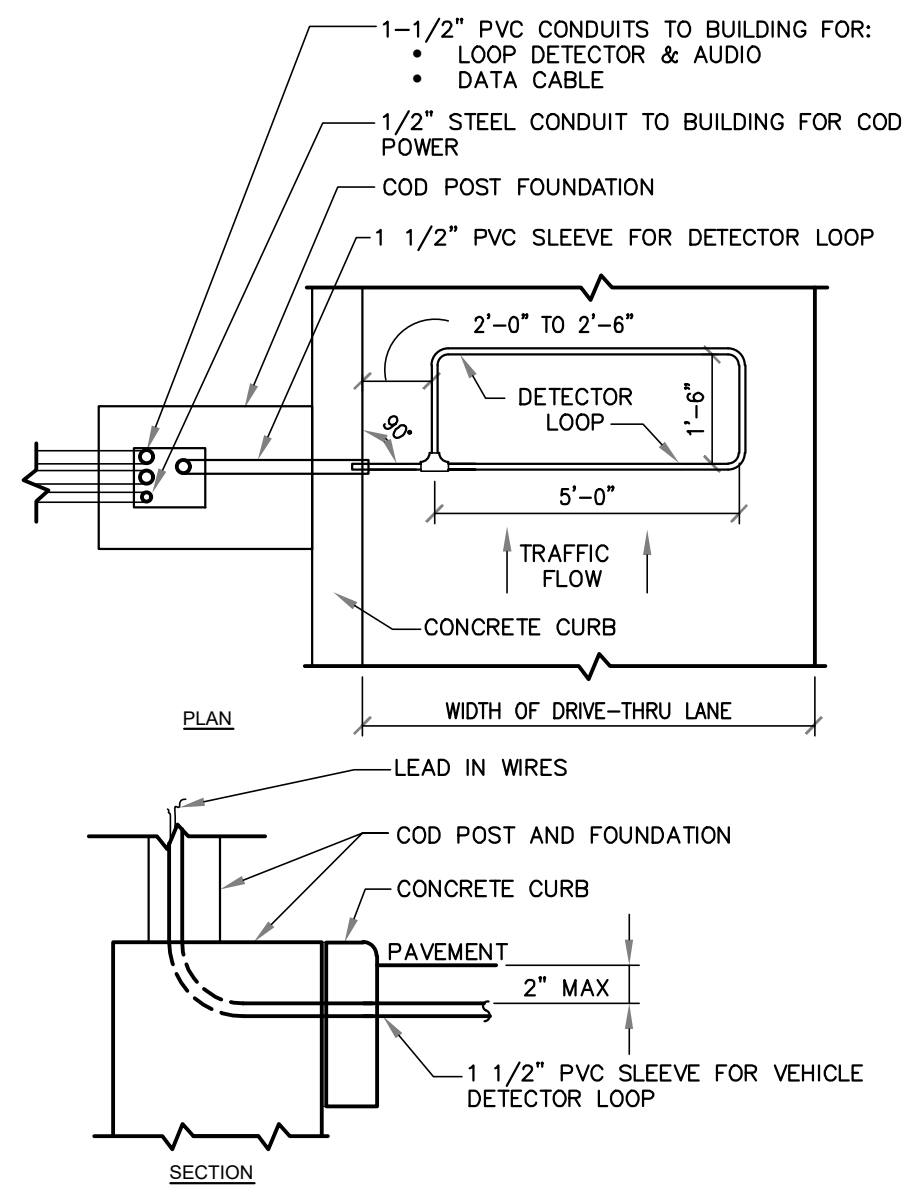


- NOTES:
1. PROVIDE AN 8 IN. HAUNCH AND 1/2 IN. EXPANSION JOINT FILLER WITH SEALANT WHERE THE CONCRETE SIDEWALK ABUTS THE BUILDING.

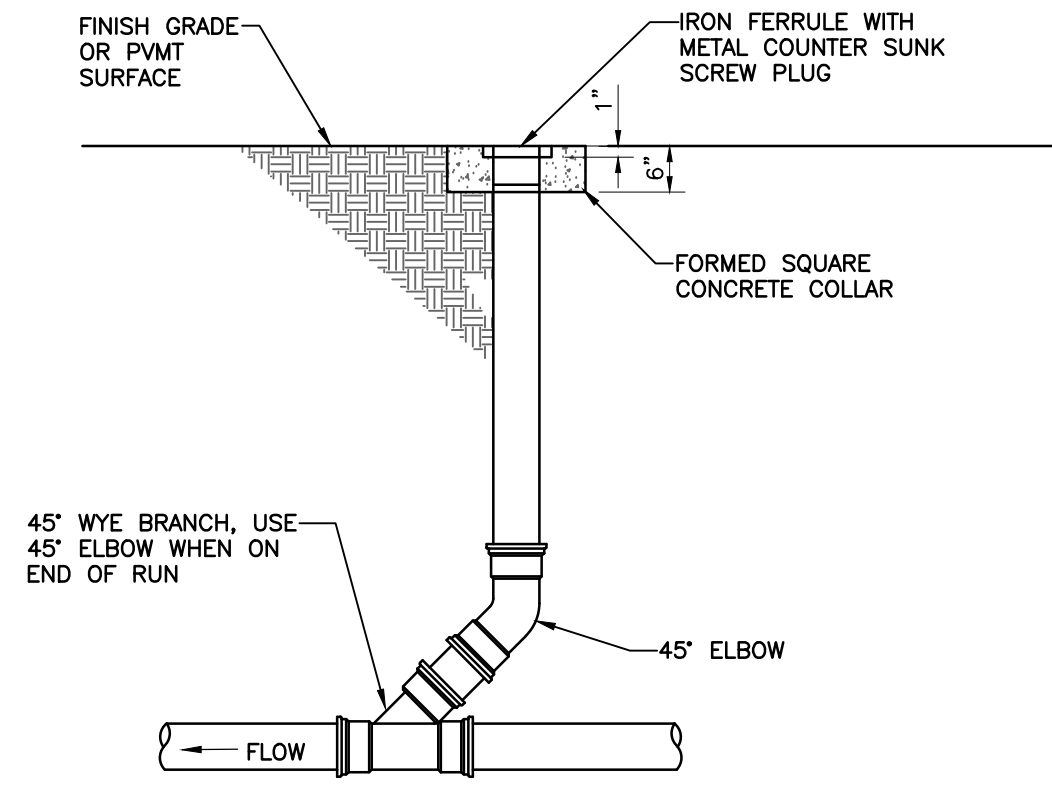
**DETAIL 12**  
**CONCRETE SIDEWALK**  
N.T.S.

**NOTES**

1. VERIFY CONDUIT SIZES AND LAYOUT WITH DETECTOR LOOP MANUFACTURER.
2. CENTER VEHICLE DETECTOR LOOP IN DRIVE THRU LANE. INSTALL PER MFR. RECOMMENDATIONS.
3. NO STEEL (REBAR OR ELECTRICAL WIRE) SHALL BE USED WITHIN 2' OF LOOP.
4. DETECTOR LOOP MANUFACTURERS: DETECTOR LOOPS MAY BE BY ONE OF THE FOLLOWINGS COMPANIES OR EQUAL.  
SM: 1-800-328-0033  
HME: 1-800-848-4468
5. DETECTOR LOOP MATERIAL: PVC TUBING 1/2" I.D., 100 PSI LOOP MADE FROM ONE LENGTH OF THIN FOURTEEN GAUGE STRANDED WIRE. LEAD-IN IS PRE-TWISTED AT FACTORY.
6. DETECTOR LOOP CONSTRUCTION: FORMED WITH ONE CONTINUOUS LENGTH OF PVC WITH NO SHARP CORNERS AS DETAILED. WIRE LOOPED, FORMED, & PIGTAILED AS DETAILED.

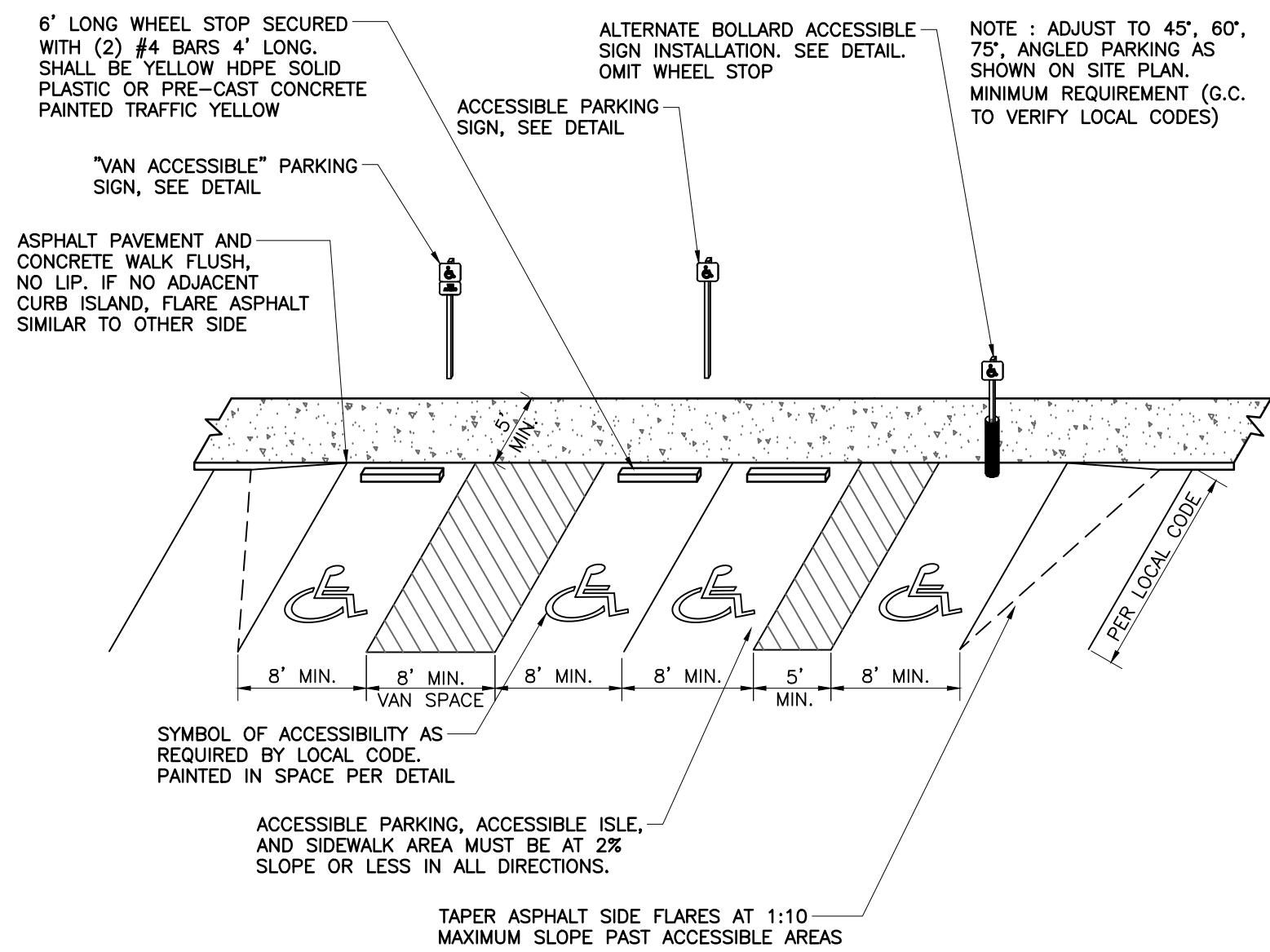


**DETAIL #13**  
**DETECTOR LOOP**  
N.T.S.



- NOTE:
1. CLEANOUT PVC SIZE TO MATCH THE PIPE SIZE OF THE SEWER TO WHICH IT IS CONNECTED.
  2. ALL PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH RUBBER GASKETED JOINTS.

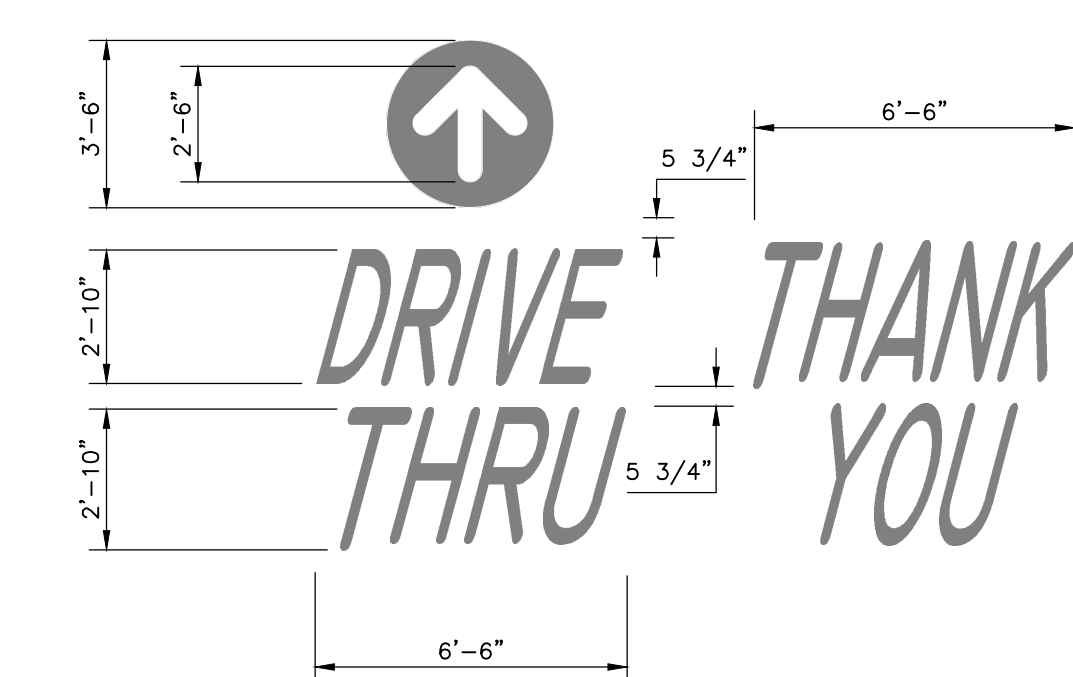
**DETAIL #14**  
**SEWER CLEANOUT**  
N.T.S.



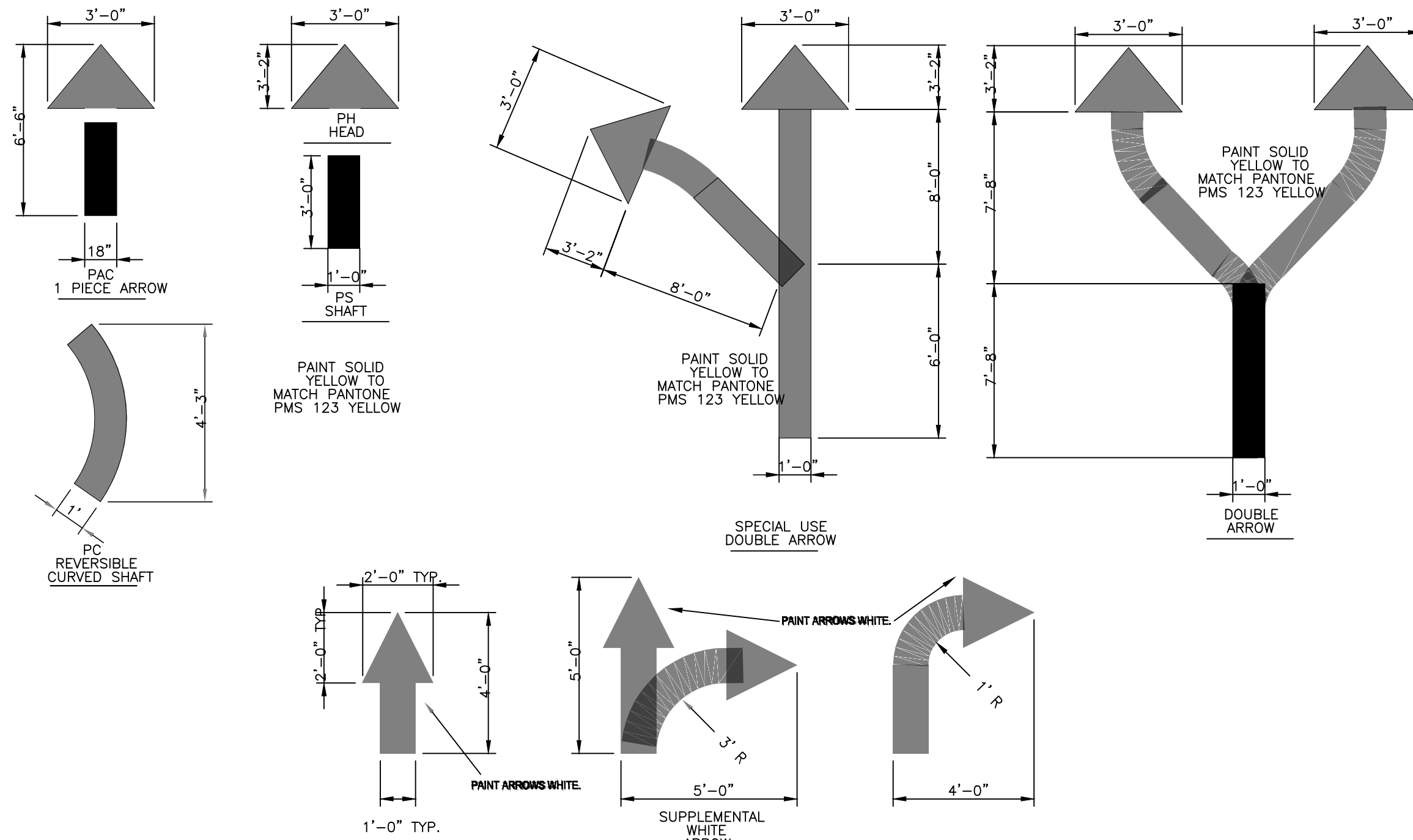
- NOTES:
1. ACCESSIBLE PARKING SPACE AND ACCESSIBLE ISLE: MAXIMUM 2.0% SLOPE IN ANY DIRECTION.
  2. ASPHALT TO CONCRETE BLENDED TRANSITION TO BE COMPLETELY FLUSH, NO LIP.
  3. PLACEMENT AND STRIPING SHOWN IN DETAIL IS SCHEMATIC, SEE SITE PLAN FOR CONFIGURATION.
  4. ACCESSIBLE ISLE SHALL BE PAINT STRIPED AT 45° ANGLE, EACH 6" WIDE STRIPE AT 24" ON CENTER.

**DETAIL #15**  
**ACCESSIBLE PARKING**  
N.T.S.

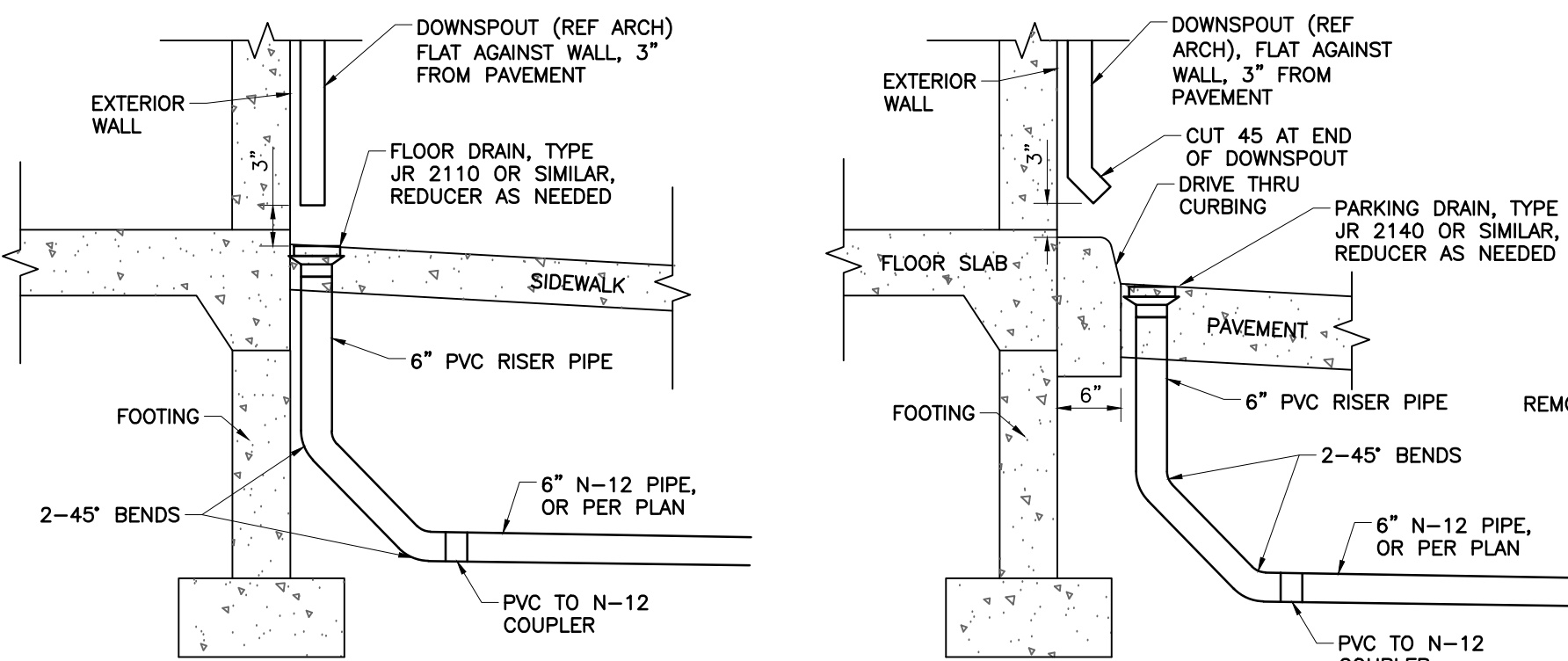
- PAVEMENT BRANDING NOTES:**
1. YELLOW PAINT (PMS123) IS USED FOR ALL DRIVE-THRU MARKINGS.
  2. THE WORDS 'DRIVE-THRU' AND THE CIRCLE ARROW ARE PLACED AT ALL ENTRANCES TO THE LOT APPROX. 25' TO 30' FROM THE CURB OR SIDEWALK.
  3. THE WORDS 'DRIVE-THRU' SHOULD BE CENTERED IN THE DRIVEWAY FOR ONE WAY TRAFFIC (ON THE INGRESS SIDE OF THE DRIVE AISLE IF THERE IS TWO WAY TRAFFIC).
  4. THE CIRCLE DIRECTIONAL ARROW SHOULD BE CENTERED ABOVE THE WORD 'DRIVE' APPROX. 5' IN TO THE PARKING LOT.
  5. IF FIVE OR MORE ARROWS ARE NEEDED TO DIRECT CARS TO THE DRIVE-THRU, PLAN THE CORRECT PLACEMENT OF THE ARROWS TO INCLUDE THE APPLICATION OF THE WORDS 'DRIVE-THRU' WITH AN ARROW CENTERED ABOVE THE WORD 'DRIVE', ORIENTED TO THE DECISION POINT.
  6. THE ARROW ART KNOCKS OUT SO THAT THE ARROW IS THE COLOR OF THE UNDERLYING PAVEMENT.



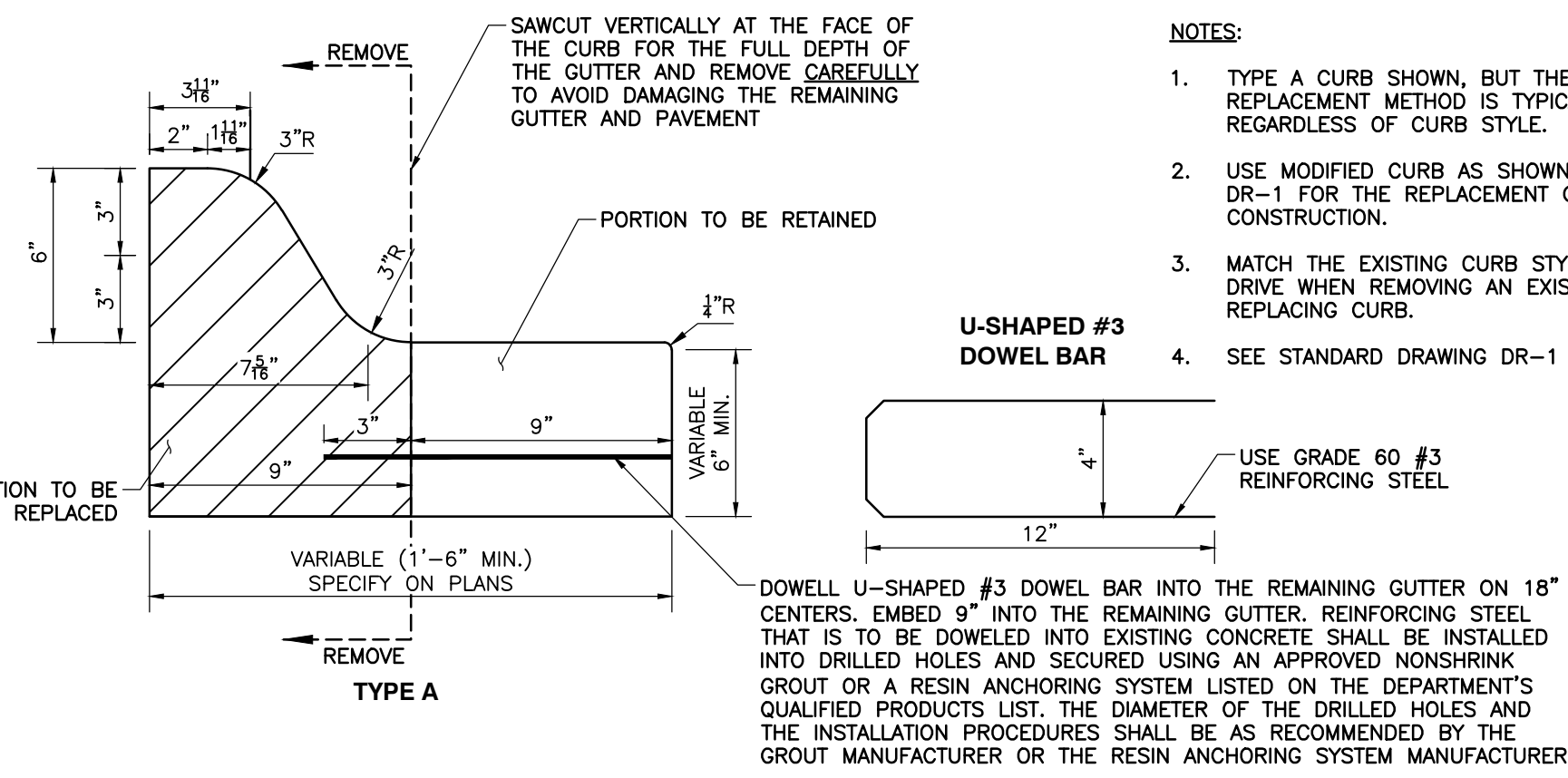
**DETAIL #18**  
**PAVEMENT BRANDING**  
N.T.S.



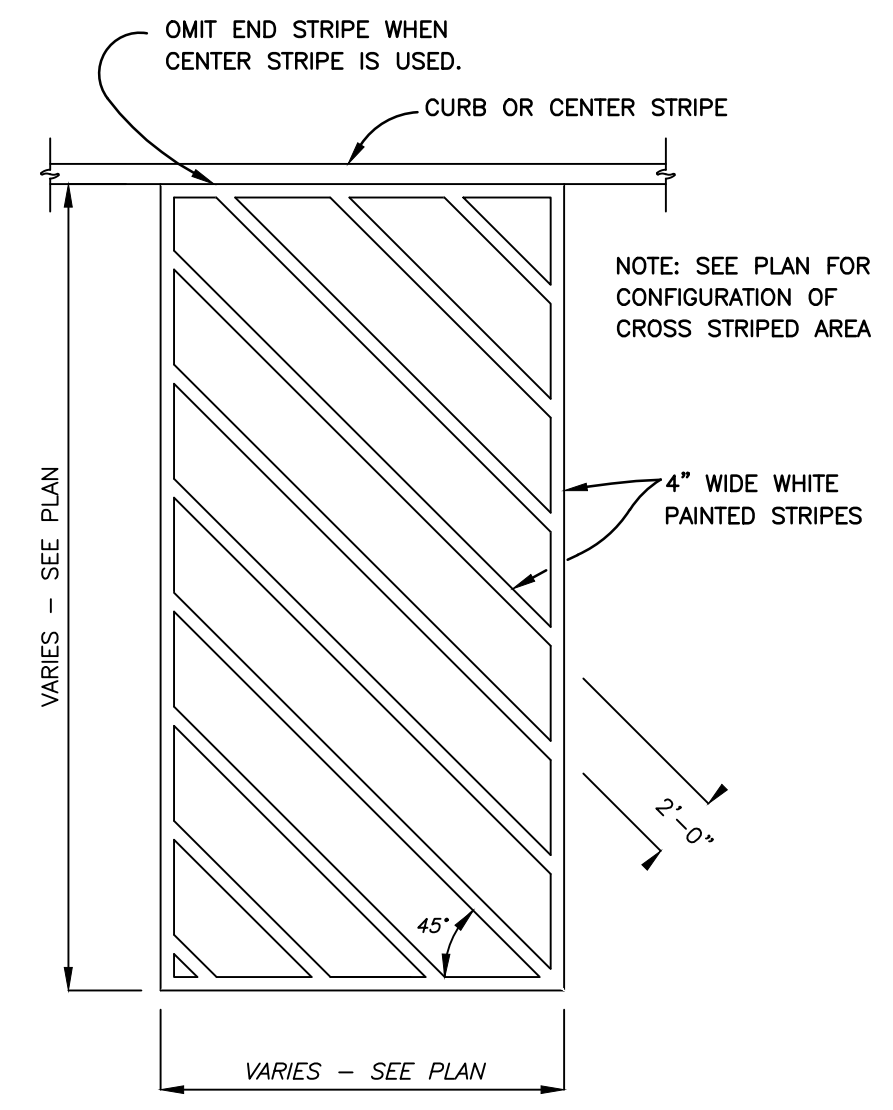
**DETAIL #16**  
**DIRECTIONAL ARROWS**  
N.T.S.



**DETAIL #19**  
**DOWNSPOUT CONNECTION DETAIL**  
N.T.S.

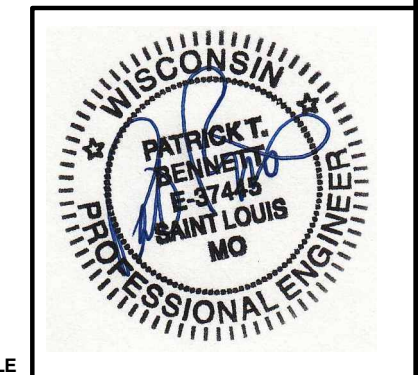


**DETAIL #20**  
**ARDOT CURB REMOVAL DETAIL**  
NOT TO SCALE



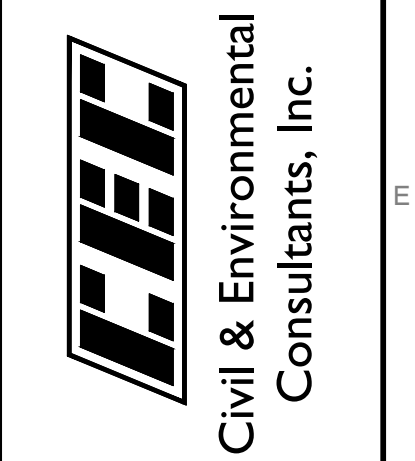
**DETAIL #17**  
**STRIPING DETAIL**  
N.T.S.

- NOTES:
1. TYPE A CURB SHOWN, BUT THE REMOVAL AND REPLACEMENT METHOD IS TYPICAL AND SHALL BE USED REGARDLESS OF CURB STYLE.
  2. USE MODIFIED CURB AS SHOWN IN STANDARD DRAWING DR-1 FOR THE REPLACEMENT CURB IN NEW DRIVEWAY CONSTRUCTION.
  3. MATCH THE EXISTING CURB STYLE ON EITHER SIDE OF THE DRIVE WHEN REMOVING AN EXISTING DRIVEWAY AND REPLACING CURB.
  4. SEE STANDARD DRAWING DR-1 FOR ADDITIONAL DETAILS.



NO.	DATE	REVISION RECORD	DESCRIPTION

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph. 412.429.2324 · 800.365.2324  
www.cecinc.com



**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081



CONSTRUCTION DETAILS		JTC	JCW
DATE:	04/20/2026	DRAWN BY:	JCW
DWG SCALE:	1"=20'	CHECKED BY:	387-510
PROJECT NO.:		APPROVED BY:	DRAFT

DRAWING NO.: **C801**  
SHEET 12 OF 24

P:\1300-0001\1300-5101-C801-DWG\DWG\1307-510-C801-CONSTRUCTION DETAILS.dwg (07/11/2026 - 10:49) - Lp: 4/20/2026 8:55 AM



Table 1: Maximum Hydraulic Rate and Rim to Outlet Invert Difference

Arcadia AR3 (36" [900 mm] Manhole)		Arcadia AR4 (48" [1200 mm] Manhole)	
Maximum Hydraulic Rate (Bypass) cfs (L/s)	Required Rim to Outlet Invert Difference in (mm)	Maximum Hydraulic Rate (Bypass) cfs (L/s)	Required Rim to Outlet Invert Difference in (mm)
1.0 (28.3)	35 (889)	1.9 (53.8)	35 (889)
1.4 (39.6)	36 (914)	2.5 (70.7)	36 (914)
1.5 (42.4)	37 (940)	2.7 (76.4)	37 (940)
2.3 (65.1)	38 (965)	3.3 (93.4)	38 (965)
2.9 (82.1)	39 (991)	4.2 (118.9)	39 (991)
3.4 (96.2)	40 (1016)	4.9 (138.7)	40 (1016)
4.2 (118.9)	42 (1067)	6.1 (172.7)	42 (1067)
4.9 (138.7)	44 (1118)	7.1 (201.0)	44 (1118)

Arcadia AR5 (60" [1500 mm] Manhole)		Arcadia AR6 (72" [1800 mm] Manhole)	
Maximum Hydraulic Rate (Bypass) cfs (L/s)	Required Rim to Outlet Invert Difference in (mm)	Maximum Hydraulic Rate (Bypass) cfs (L/s)	Required Rim to Outlet Invert Difference in (mm)
2.9 (82.1)	35 (889)	4.2 (118.9)	35 (889)
3.9 (110.4)	36 (914)	5.6 (158.5)	36 (914)
4.3 (121.7)	37 (940)	6.2 (175.5)	37 (940)
5.0 (141.5)	38 (965)	7.3 (206.7)	38 (965)
6.4 (181.2)	39 (991)	9.3 (263.3)	39 (991)
7.6 (215.2)	40 (1016)	10.9 (308.6)	40 (1016)
9.5 (269.0)	42 (1067)	13.6 (385.1)	42 (1067)
11.0 (311.4)	44 (1118)	15.9 (450.2)	44 (1118)
12.4 (351.1)	46 (1168)	17.9 (506.8)	46 (1168)

Arcadia AR8 (96" [2400 mm] Manhole)		Arcadia AR10 (120" [3000 mm] Manhole)	
Maximum Hydraulic Rate (Bypass) cfs (L/s)	Required Rim to Outlet Invert Difference in (mm)	Maximum Hydraulic Rate (Bypass) cfs (L/s)	Required Rim to Outlet Invert Difference in (mm)
10.0 (283.1)	36 (914)	15.0 (424.7)	36 (914)
11.0 (311.4)	37 (940)	17.2 (487.0)	37 (940)
12.9 (365.2)	38 (965)	19.0 (538.0)	38 (965)
16.5 (467.2)	39 (991)	24.9 (705.0)	39 (991)
19.5 (552.1)	40 (1016)	29.6 (838.1)	40 (1016)
24.3 (688.0)	42 (1067)	37.3 (1056.2)	42 (1067)
28.3 (801.3)	44 (1118)	43.7 (1237.4)	44 (1118)
31.8 (900.4)	46 (1168)	49.3 (1396.0)	46 (1168)
35.0 (991.0)	48 (1219)	54.3 (1537.6)	48 (1219)

# Technical Note

## TN 1.16 Arcadia™ Maximum Hydraulic Rates and Required Rim to Outlet Invert Difference

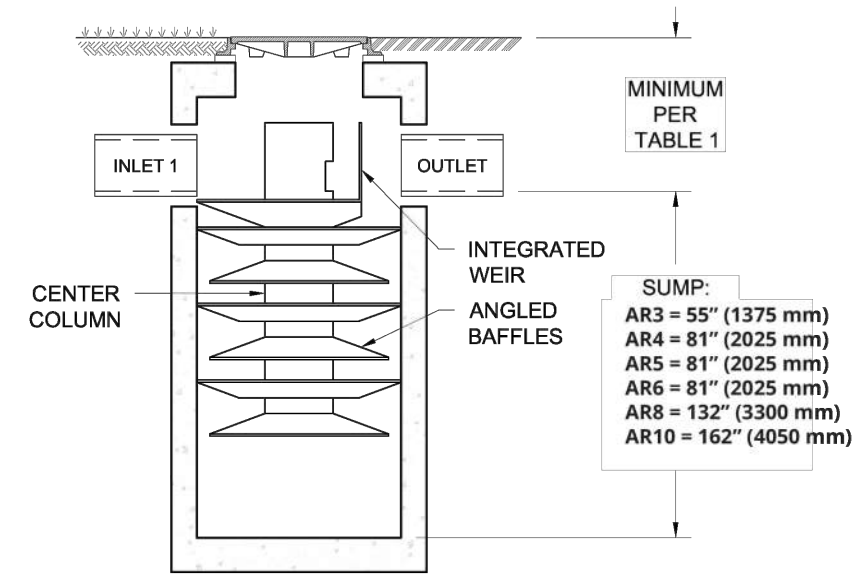
### Introduction

The Arcadia is a single manhole hydrodynamic separator designed to remove total suspended solids and other contaminants from stormwater. The device employs a series of angled baffles with a vertical weir wall separating the inlet(s) and outlet pipes. This weir wall allows the unit to bypass excessive stormwater flows internally once the inletting rates exceed the designed treatment rate. This document describes the maximum hydraulic rate (MHR), or bypass capacity of the device based on unit size and rim to invert elevation difference. MHR should not be confused with Maximum Treatment Rate (MTR) which would be the flow rate at which the device meets prescribed treatment criteria.

### Maximum Hydraulic Rate and Rim to Outlet Invert Difference

The maximum hydraulic rate (bypass) is governed in part by the space between the outlet invert elevation and the rim elevation of the structure, accounting for freeboard (air space). The inlet(s) and outlet invert for Arcadias are typically at the same elevation. The table below assumes a 4" (100 mm) tall frame mounted on an 8" (200 mm) thick top slab. Contact Application Engineering for applications that require rim to invert differences shallower than the minimums shown in Table 1, or for bypass rates higher than the maximums listed in Table 1.

Figure 1: Arcadia Standard Detail



# Arcadia™ Maintenance Guide

One of Arcadia's advantages is the ease of maintenance. Like any system that collects pollutants, the Arcadia hydrodynamic separator must be regularly maintained for continued effectiveness. Maintenance is a simple procedure performed using a vacuum truck or similar equipment. The system is designed to minimize the volume of water lost during routine maintenance, reducing disposal costs.

Contractors can access the pollutants stored in the manhole through the manhole cover. This allows them to gain vacuum hose access to the bottom of the manhole to remove sediment and trash. There is no confined space entry necessary for inspection or maintenance.

The entire maintenance procedure typically takes 2 to 4 hours, depending on the system's size, the amount of captured material, and the vacuum truck's capacity.

Local regulations may apply to the maintenance procedure. Safe and legal disposal of pollutants is the responsibility of the maintenance contractor. Maintenance should be performed only by a qualified contractor.

### Inspection and Cleaning Cycle

Periodic inspection is necessary to determine the need for and frequency of maintenance. Inspections should begin as soon as construction is complete and then on an annual basis ongoing. Under normal use, the system will need to be cleaned every 1-3 years.

Sites that have excessive oil, fuel or sediment runoff may shorten the maintenance cycle. Periodic inspection is important.

### Determining When to Clean

To determine the sediment depth, the maintenance contractor should lower a stadia rod into the manhole until it reaches the top of the captured sediment. Mark this spot on the rod, then continue pushing the rod through the sediment until it reaches the bottom of the sump. Next, mark the second spot on the rod then compare the two markings to determine the depth of the captured sediment.

Maintenance should occur when the sediment has reached a depth of 18" (450 mm).

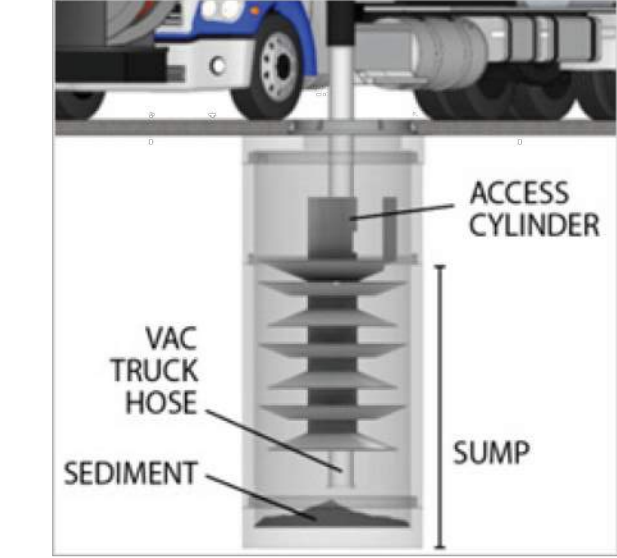
### Arcadia Storage Capacities

Model	Manhole Diameter in (mm)	Total System Volume Gallons (Liters)	Treatment Chamber Capacity Gallons (Liters)	Standard Sediment Capacity (18" depth) Yards <sup>3</sup> (m <sup>3</sup> )	NJDEP Sediment Capacity (50% of Standard Depth) Yards <sup>3</sup> (m <sup>3</sup> )
AR3	36 (914)	242 (917)	203 (767)	0.39 (0.30)	0.19 (0.15)
AR4	48 (1219)	635 (2402)	564 (2135)	0.70 (0.53)	0.35 (0.27)
AR5	60 (1524)	991 (3753)	881 (3336)	1.09 (0.83)	0.55 (0.42)
AR6	72 (1829)	1428 (5404)	1269 (4804)	1.57 (1.20)	0.79 (0.60)
AR8	96 (2438)	4136 (15656)	3854 (14588)	2.79 (2.14)	1.40 (1.07)
AR10	120 (3048)	7931 (30022)	7490 (28354)	4.36 (3.34)	2.18 (1.67)

### Maintenance Procedures

- Remove the manhole cover to provide access to the pollutant storage. Pollutants are stored in the sump, below the unit assembly. Access this area through the access cylinder (larger than 10" (254 mm) diameter for all sizes).
- Use a vacuum truck or other similar equipment to remove all water, debris, oil and sediment. See Figure 1.
- Use a high pressure hose to clean the manhole of all remaining sediment and debris. Then, use the vacuum truck to remove the water.
- Fill the clean manhole with water until the level reaches the invert of the outlet pipe.
- Replace the manhole cover.
- Dispose of the polluted water, oil, sediment and trash at an approved facility.
  - Local regulations prohibit the discharge of solid material into the sanitary system. Check with the local sewer authority for authorization to discharge the liquid.
  - Some localities treat the pollutants as leachate. Check with local regulators about disposal requirements.
  - Additional local regulations may apply to the maintenance procedure.

Figure 1



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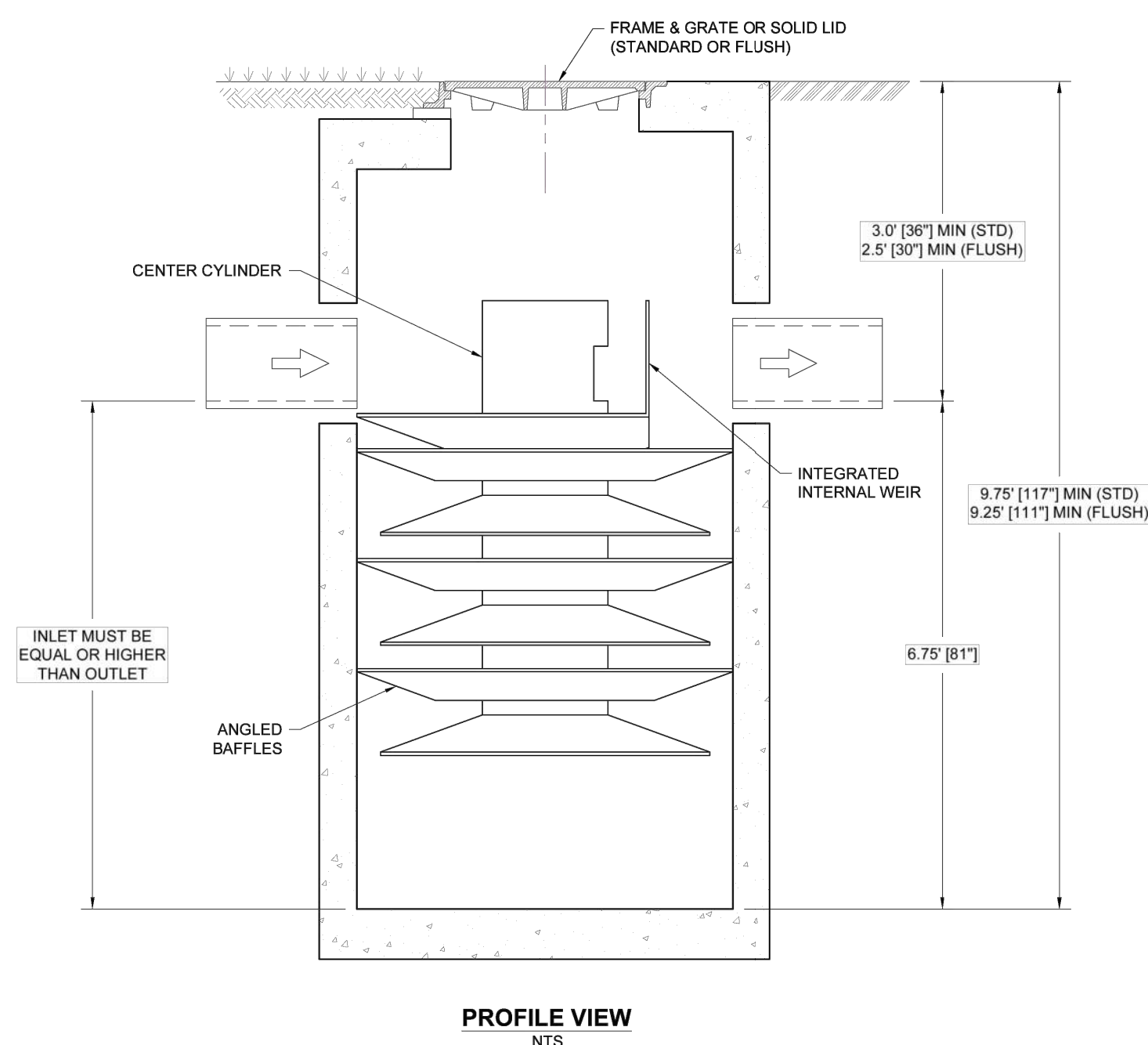


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800-821-6710

## ARCADIA AR5PC

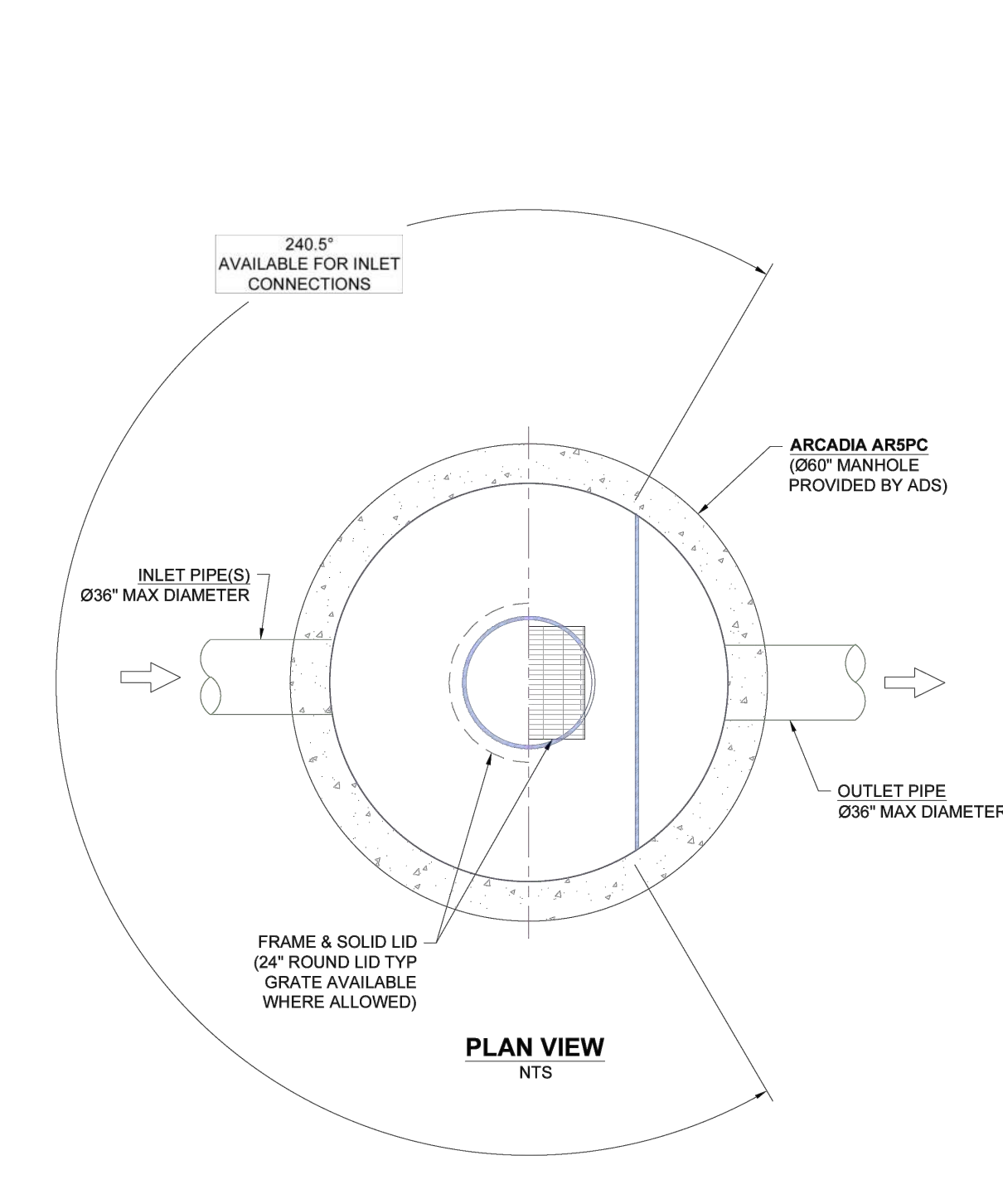


**PRODUCT SPECIFICATIONS**

- THE STORMWATER TREATMENT UNIT SHALL BE AN INLINE UNIT CAPABLE OF CONVEYING 100% OF THE DESIGN PEAK FLOW. IF PEAK FLOW RATES EXCEED MAXIMUM HYDRAULIC RATE, THE UNIT SHALL BE INSTALLED OFFLINE.
- THE ARCADIA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 80% OF THE SUSPENDED SOLIDS ON AN ANNUAL AGGREGATE REMOVAL BASIS. SAID REMOVAL SHALL BE BASED ON FULL-SCALE THIRD PARTY VERIFIED TESTING USING 0#-110 MEDIA GRADATION OR EQUIVALENT AND 300 MG/L INFLUENT CONCENTRATION. FULL SCALE TESTING SHALL HAVE INCLUDED SEDIMENT CAPTURE BASED ON ACTUAL TOTAL MASS COLLECTED BY THE STORMWATER TREATMENT UNIT.

OR

- THE ARCADIA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS USING A MEDIA MIX WITH D50=75 MICRON AND 200 MG/L INFLUENT CONCENTRATION PER CURRENT NJDEP/CACT HDS PROTOCOL.

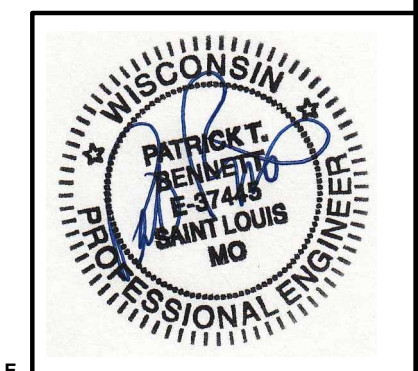


- NOTES:**
- ENGINEER / CONTRACTOR TO CONFIRM PIPE MATERIALS AND APPLICABLE ADAPTERS.
  - CONTRACTOR IS RESPONSIBLE FOR MATERIAL AND LABOR TO BRING CASTINGS TO FINISHED GRADE.
  - CONTRACTOR TO MEASURE HEIGHT OF STRUCTURE TO ENSURE THAT DEPTH OF EXCAVATION IS CORRECT.
  - UNIT SHALL CONFORM TO HS20-44 LOAD RATINGS.

4660 TREMBLAN BLVD MILLICENT, OH 44668		ARCADIA Stormwater Separator		ARCADIA AR5PC CONCRETE MANHOLE	
DATE	DATE	DATE	DATE	DATE	DATE
04/20/2026	04/20/2026	04/20/2026	04/20/2026	04/20/2026	04/20/2026
JTC	JTC	JTC	JTC	JTC	JTC
367-510	367-510	367-510	367-510	367-510	367-510

1 SHEET OF 1

## DETAIL #23 ADS ARCADIA WATER QUALITY STRUCTURE NOT TO SCALE



DATE	04/20/2026	DRAWN BY	JTC
DWG SCALE	1"=20'	CHECKED BY	JCW
PROJECT NO.	367-510	APPROVED BY	DRAFT

DRAWING NO.: **C803**  
SHEET 14 OF 24

**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081

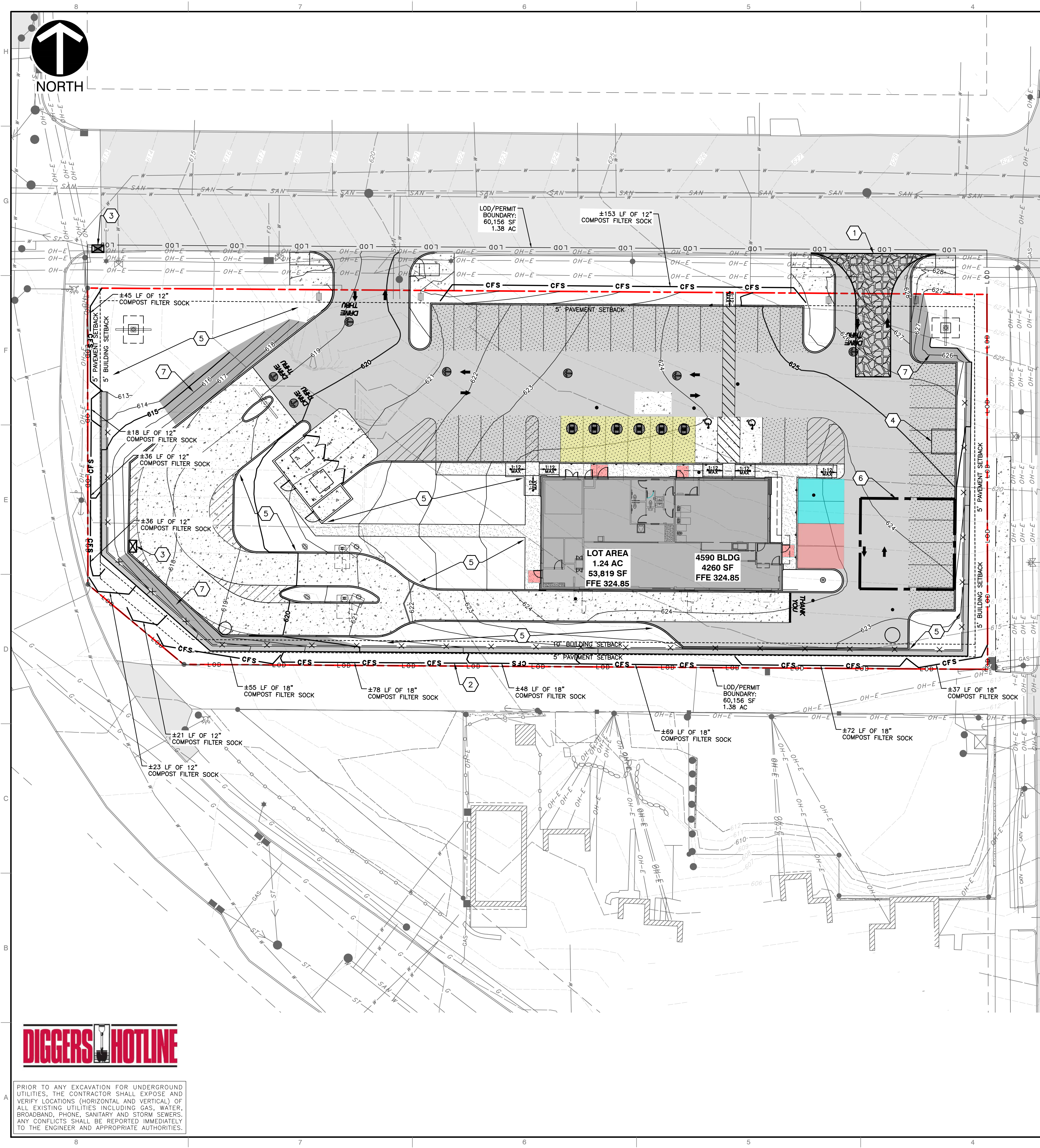


**CEL**  
Civil & Environmental  
Consultants, Inc.

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph. 412.429.2324 · 800.365.2374  
www.ccecinc.com

NO.	DATE	DESCRIPTION

P:\1300-0001\1307-510-001-0000-CONSTRUCTION DETAILS\DWG\003 LS(1/17/2026 - Arty) - LP 4/20/2026 8:55 AM



**LEGEND:**

- PROPERTY BOUNDARY
- LOD --- LIMITS OF DISTURBANCE
- CFS --- COMPOST FILTER SOCK

**GRADING/SEDIMENT & EROSION CONTROL NOTES**

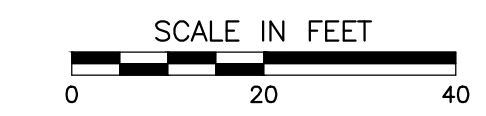
1. SEDIMENT AND EROSION CONTROL SHALL NOT BE LIMITED TO THE MEASURES SHOWN ON THE PLANS. THE CONTRACTOR, WITH THE APPROVAL OF THE COUNTY INSPECTOR, SHALL UTILIZE BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM ENTERING ADJACENT PROPERTIES, ROADWAYS, STORM SEWERS, AND DRAINAGEWAYS.
2. ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS INCLUDING TRENCH BACKFILLS WITHIN AND OFF THE ROAD RIGHT-OF-WAY SHALL BE COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (ASTM D-1557). ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
3. ALL FILLED PLACES IN PROPOSED AND EXISTING SHEBOYGAN COUNTY ROADS (HIGHWAYS) SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP TO 90 PERCENT MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (ASTM D-1557). PAVED AREAS IN CUTS SHALL MEET THE SAME COMPACTION REQUIREMENTS. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING OPERATIONS.
4. ALL TRUCKING OPERATIONS SHALL FOLLOW THE APPROVED TRUCKING HAIL ROUTE. CONCRETE TRUCKS SHALL HAVE PROPER WASHOUTS, AS APPROVED BY THE COUNTY INSPECTOR. COUNTY AND STATE ROADS SHALL BE CLEANED AND KEPT CLEAR OF MUD, SEDIMENT, AND ANY OTHER DEBRIS AT ALL TIMES THROUGHOUT CONSTRUCTION.
5. ALL ON-SITE TRASH, LITTER, DISCARDED BUILDING MATERIALS, OTHER CONSTRUCTION SITE WASTES, AND DEBRIS, EITHER EXISTING OR FROM CONSTRUCTION, MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.
6. DEBRIS AND FOUNDATION MATERIAL FROM ANY EXISTING ON-SITE BUILDING OR STRUCTURE WHICH IS SCHEDULED TO BE RAZED FOR THIS DEVELOPMENT MUST BE PROPERLY DISPOSED OF OFF-SITE.
7. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY TOILET FACILITIES TO SERVE THE NUMBER OF WORKERS ON THE SITE.
8. CONTRACTOR SHALL PROVIDE THE COUNTY INSPECTOR INFORMATION CONCERNING STORAGE AND HANDLING OF ALL HAZARDOUS AND TOXIC SUBSTANCES BROUGHT ONTO THE SITE. THE CONTRACTOR WILL ADHERE TO APPLICABLE FEDERAL AND STATE REGULATIONS CONCERNING STORAGE AND DISPENSERS, SPILL PREVENTION CONTROL, AND COUNTERMEASURE PLANS FOR CLEAN-UP.
9. ANY WELLS AND/OR SPRINGS WHICH MAY EXIST ON THIS PROPERTY SHOULD BE LOCATED AND SEALED IN A MANNER ACCEPTABLE TO THE SHEBOYGAN COUNTY HIGHWAY DEPARTMENT AND THE BUILDING CODE ENFORCEMENT DIVISION OF THE COMMUNITY DEVELOPMENT DEPARTMENT.
10. SOFT SOILS IN THE BOTTOM AND BANKS OF ANY EXISTING OR FORMER POND SITES OR TRIBUTARIES OR ANY SEDIMENT BASINS, TRAPS, OR OTHER ESC MEASURES SHOULD BE REMOVED, SPREAD OUT AND PERMITTED TO DRY SUFFICIENTLY TO BE USED AS FILL. NONE OF THIS MATERIAL SHOULD BE PLACED IN PROPOSED PUBLIC RIGHT-OF-WAY LOCATIONS OR ON ANY STORM SEWER LOCATION. ANY OTHER WET SOILS THAT ARE OUTSIDE THE OPTIMUM MOISTURE RANGE TO OBTAIN THE PROPER COMPACTION SHALL BE AIR DRIED SUFFICIENTLY BEFORE USE AS FILL.
11. A PRE-CONSTRUCTION CONFERENCE MUST BE SCHEDULED WITH THE DIRECTOR OF DEVELOPMENT REVIEW PRIOR TO THE START OF EACH CONSTRUCTION PHASE OF LAND DISTURBANCE ACTIVITY. THE PERMITEE WILL BE RESPONSIBLE FOR NOTIFYING ALL CONTRACTORS, UTILITY CREWS, AND OTHER ENTITIES THAT WILL PERFORM WORK AT THE SITE TO BE IN ATTENDANCE.
12. THE EROSION CONTROL INSPECTOR OF THE COMMUNITY DEVELOPMENT DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CLEARING, GRADING, AND/OR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR AN INSPECTION OF THE SITE.
13. ALL EXCAVATIONS, GRADING, OR FILLING SHALL HAVE A FINISHED GRADE NOT TO EXCEED A 3:1 SLOPE (33%).
14. TEMPORARY SILTATION CONTROL MEASURES (STRUCTURAL) SHALL BE MAINTAINED UNTIL VEGETATIVE COVER IS ESTABLISHED AT A DENSITY SUFFICIENT TO PROVIDE EROSION CONTROL ON THE SITE.
15. CONTRACTOR SHALL PROVIDE DUST CONTROL, AS DETERMINED BY THE COUNTY INSPECTOR.
16. UPON COMPLETION OF STORM SEWERS, SILTATION CONTROL SHALL BE PROVIDED AROUND ALL OPEN SEWER INLETS AND SHALL REMAIN UNTIL THE DISTURBED DRAINAGE AREAS HAVE BEEN PROPERLY STABILIZED.
17. WHERE NATURAL VEGETATION IS REMOVED DURING GRADING, VEGETATION SHALL BE RE-ESTABLISHED IN SUCH A DENSITY AS TO PREVENT EROSION.
18. TEMPORARY VEGETATION OR OTHER APPROVED SURFACE STABILIZATION METHODS SHALL BE ESTABLISHED WITHIN 14 DAYS WHEN THE SOIL DISTURBANCE HAS CEASED ON AREAS GREATER THAN 2,000 SQ. FT.
19. PERMANENT GRASS MUST BE ESTABLISHED AT A DENSITY SUFFICIENT TO PROVIDE EROSION CONTROL ON THE SITE WITHIN 30 DAYS OF THE COMPLETION OR SUSPENSION OF GRADING OPERATIONS. BETWEEN PERMANENT GRASS SEEDING PERIODS, TEMPORARY COVER SHALL BE PROVIDED ACCORDING TO THE RECOMMENDATION OF THE DIRECTOR OF THE DIVISION OF DEVELOPMENT REVIEW.
20. ALL SILTATION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR BI-WEEKLY, AT A MINIMUM, AND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT FOR DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED. ALL INSTALLED BMP'S AND OTHER POLLUTION CONTROL MEASURES SHALL BE INSPECTED FOR PROPER INSTALLATION, OPERATION, AND MAINTENANCE. LOCATIONS WHERE STORMWATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN FOUR CALENDAR DAYS OF THE INSPECTION.
21. SEDIMENT SHALL BE WASHED FROM ALL VEHICLES AT WASH DOWN STATION PRIOR TO LEAVING THE SITE. NO TRACKING OF MUD ONTO PUBLIC ROADS SHALL BE ALLOWED.
22. ALL TRASH AND DEBRIS ON-SITE, EITHER EXISTING OR FROM CONSTRUCTION, MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.
23. THIS SITE DOES NOT REQUIRE 404/401 PERMITTING.
24. NO DEWATERING METHODS ARE ANTICIPATED OR PROPOSED FOR THIS PROJECT.
25. NO CONSTRUCTION WASTE OR POTENTIAL POLLUTION SOURCES ARE PROPOSED TO BE STORED ON SITE DURING CONSTRUCTION OR LAND DISTURBANCES.
26. PRIOR TO ANY MAJOR LAND DISTURBANCE ACTIVITY, A LAND DISTURBANCE PERMIT FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WI DNR) WILL BE REQUIRED. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF SAID PERMIT.
27. THE LOSS OF ANY CONTAINED SEDIMENT OR OTHER POLLUTANT REQUIRES IMMEDIATE ACTION WHICH MUST BE DOCUMENTED AND REPORTED TO SHEBOYGAN COUNTY.
28. PROPOSED POST CONSTRUCTION SURFACE BMP'S SHALL BE CONSTRUCTED AFTER SUBSTANTIAL COMPLETION OF LAND DISTURBANCE ACTIVITIES. ALL POST CONSTRUCTION BMP'S ARE TO BE PROTECTED FROM RUNOFF, SEDIMENT, AND DAMAGE DURING CONSTRUCTION ACTIVITIES.
29. THE FOLLOWING SUBMITTALS ARE REQUIRED PRIOR TO TEMPORARY AND PERMANENT SEEDING: 1. SEEDING DATE 2. SEED MIXTURE(S) AND RATE(S), SUPPLIER, PURITY PERCENTAGE 3. MULCHING MATERIAL(S) AND APPLICATION RATE(S) 4. MOWING HEIGHT AND SCHEDULE SEEDED AREAS SHALL BE RE-FERTILIZED 4 WEEKS AFTER INITIAL SEEDING. ALL AREAS IDENTIFIED AS BARE AND SPARSE (LESS THAN 30% GROUND COVER) DURING THE INSPECTION SHALL BE RE-SEEDING AND MULCHED. GRASS SHALL NOT BE CUT UNTIL 4 INCHES OF GROWTH OCCURS.
30. EPA ALLOWABLE NON-STORM WATER DISCHARGES:
  - WATERLINE FLUSHING
  - LANDSCAPE IRRIGATION
  - DIVERTED STREAM FLOWS
  - RISING GROUND WATERS
  - UNCONTAMINATED GROUND WATER INFILTRATION
  - UNCONTAMINATED PUMPED GROUND WATER
  - FOUNDATION DRAINS
  - DISCHARGE FROM POTABLE WATER SOURCES
  - AIR CONDITIONING CONDENSATION
  - IRRIGATION WATER, SPRINGS
  - WATER FROM CRAWL SPACE PUMPS
  - FOOTING DRAINS
  - LAWN WATERING
  - INDIVIDUAL RESIDENT CAR WASHING
  - FLOWS FROM RIPARIAN HABITATS AND WETLANDS
  - DE-CHLORINATED SWIMMING POOL DISCHARGES
  - STREET WASH WATER
  - RESIDENTIAL BUILDING WASH WATERS, WITHOUT DETERGENT
  - DISCHARGES FROM EMERGENCY FIRE FIGHTING ACTIVITIES

**KEY NOTES**

1. PROPOSED ROCK CONSTRUCTION ENTRANCE. REFER TO DETAIL 1 ON SHEET C901.
2. PROPOSED COMPOST FILTER SOCK. REFER TO DETAIL 5 ON C902.
3. PROPOSED INLET PROTECTION. REFER TO DETAIL 2 ON SHEET C901.
4. CONCRETE WASHOUT. REFER TO DETAIL 4 ON SHEET C901.
5. PROPOSED SEED AND MULCH UNTIL VEGETATION IS ESTABLISHED. REFER TO NOTE #18 ON THIS PAGE.
6. PROPOSED CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE AREA. A SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN WILL BE REQUIRED TO BE SUBMITTED BY THE CONTRACTOR IF ANY GASOLINE, PETROLEUM, LUBRICANTS, CHEMICALS, OR OTHER POTENTIAL POLLUTANTS WILL BE STORED OR USED ON THE SITE DURING CONSTRUCTION.
7. PROPOSED EROSION CONTROL BLANKET. SEE DETAIL 6 ON C902.

**NOTES:**

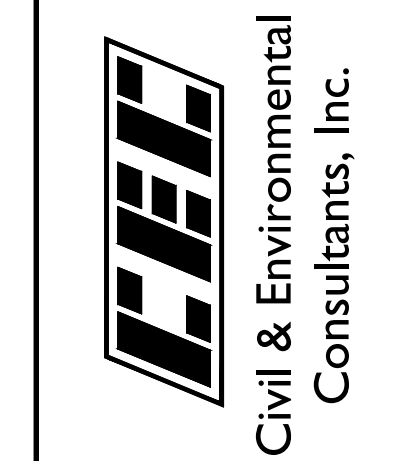
1. BOLTS AT GROUND MOUNTED SIGNS AND DRIVE-THRU EQUIPMENT ARE TO BE COVERED BY MULCH.



\*HAND SIGNATURE ON FILE

NO.	DATE	REVISION RECORD	DESCRIPTION

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph: 412.429.2324 - 800.365.2324  
www.cecinc.com

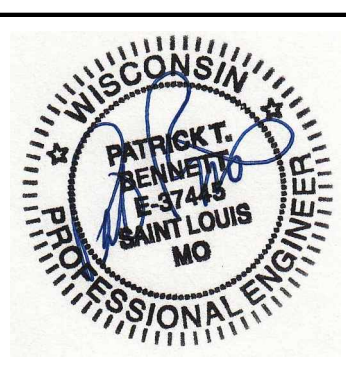


**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081



DATE: 04/20/2025	DRAWN BY: JTC	PROJECT NO: 387-510	APPROVED BY:

E&S CONTROL PLAN  
DRAWING NO: **C900**  
SHEET 15 OF 24

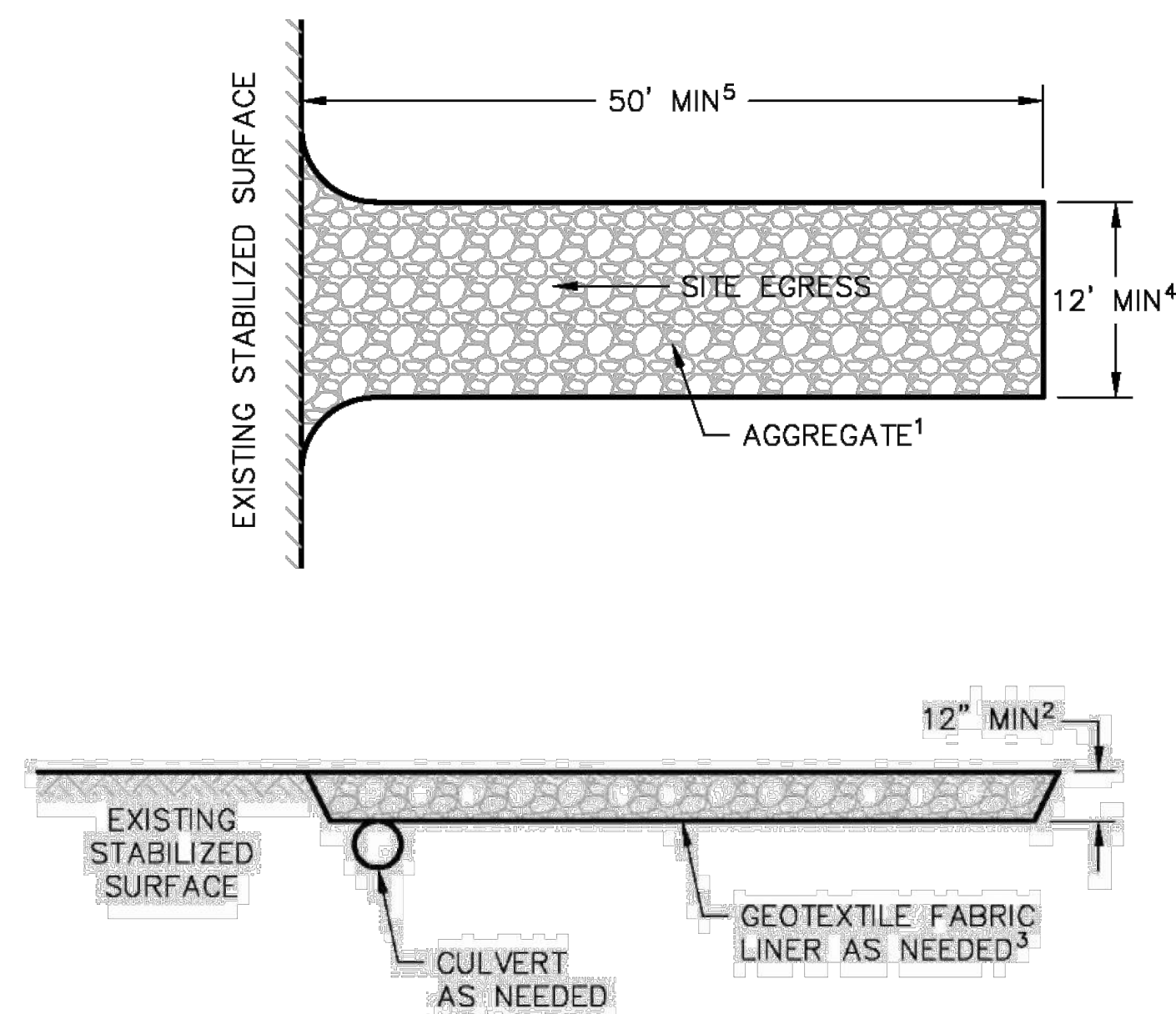


A:\100-001\187-5101-0000\187-510-0181-0000-ES PLAN\187-510-0181-0000-ES PLAN.dwg (17/2025) - JTC - 4/20/2025 8:48 AM



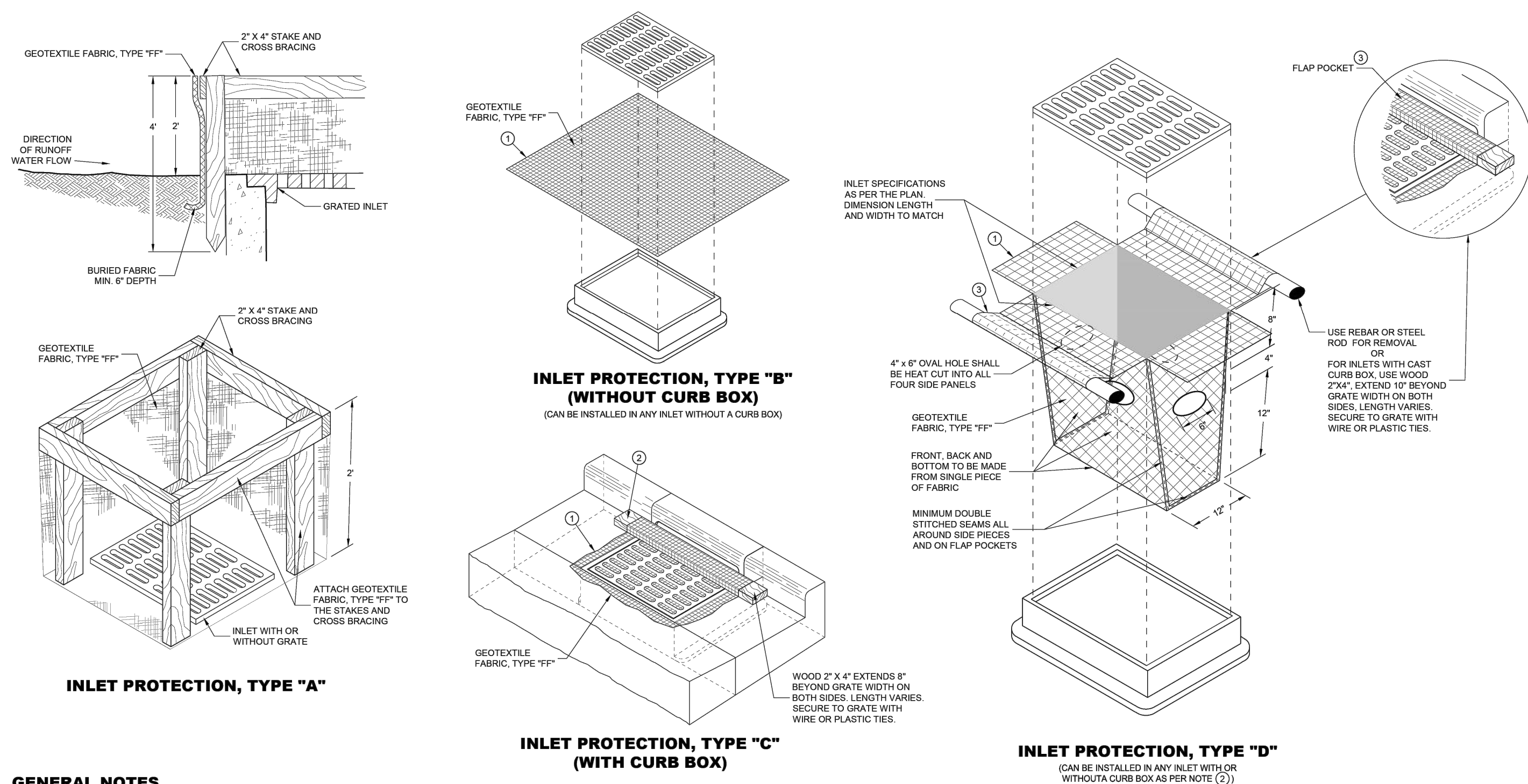
PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.

Figure 2:  
Stone tracking pad detail



- Note 1 Use hard, durable, angular stone or recycled concrete meeting the gradation in Table 1. Where this gradation is not available, meet the gradation in Wisconsin Department of Transportation (DOT) 2018 Standard Specification, Section 312, Select Crushed Material.
- Note 2 Slope the stone tracking pad in a manner to direct runoff to an approved treatment practice.
- Note 3 Select fabric type based on soil conditions and vehicle loading.
- Note 4 Install tracking pad across full width of the access point, or restrict existing traffic to a dedicated egress lane at least 12 feet wide across the top of the pad.
- Note 5 If a 50' pad length is not possible due to site geometry, install the maximum length practicable and supplement with additional practices as needed.

DETAIL 1  
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT  
NOT TO SCALE



**GENERAL NOTES**

- INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.
- MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEGMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
- 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.

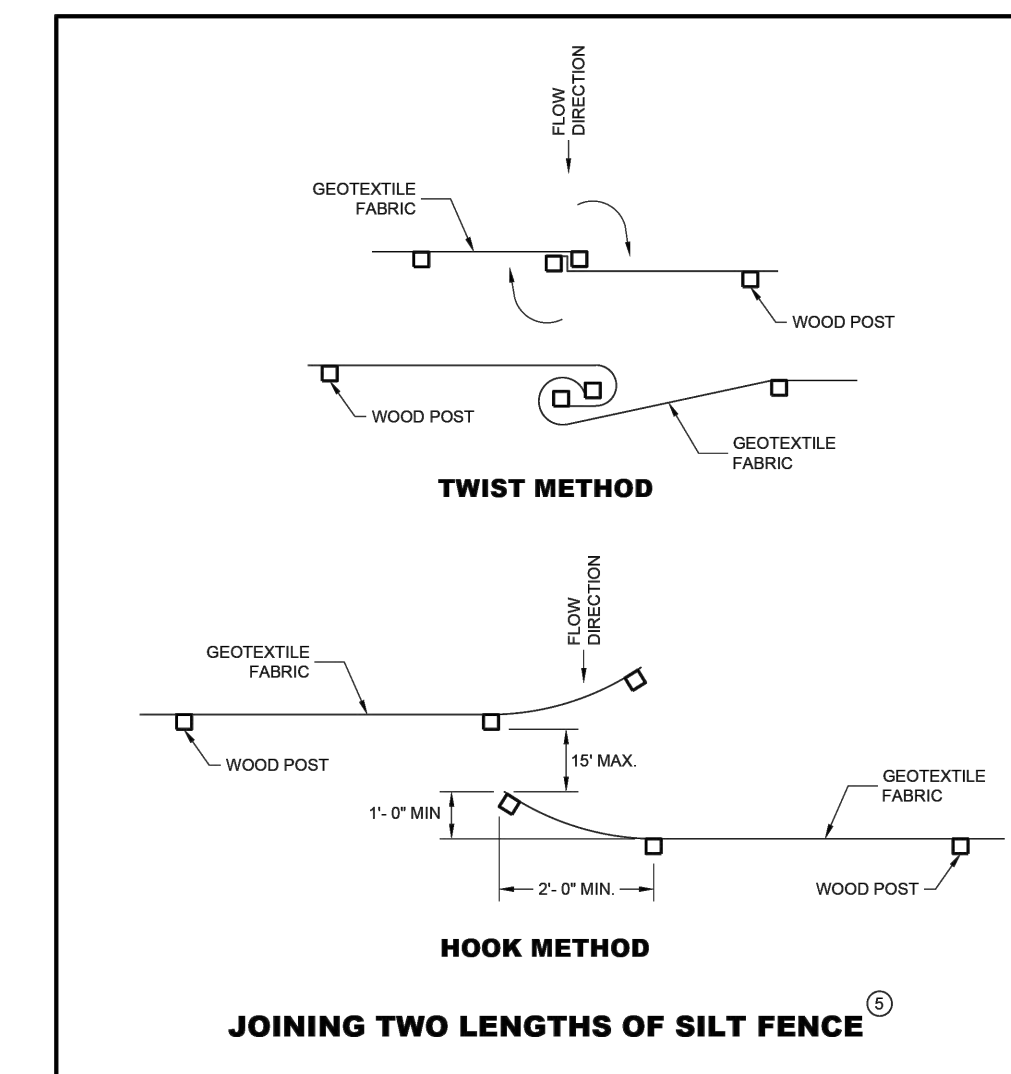
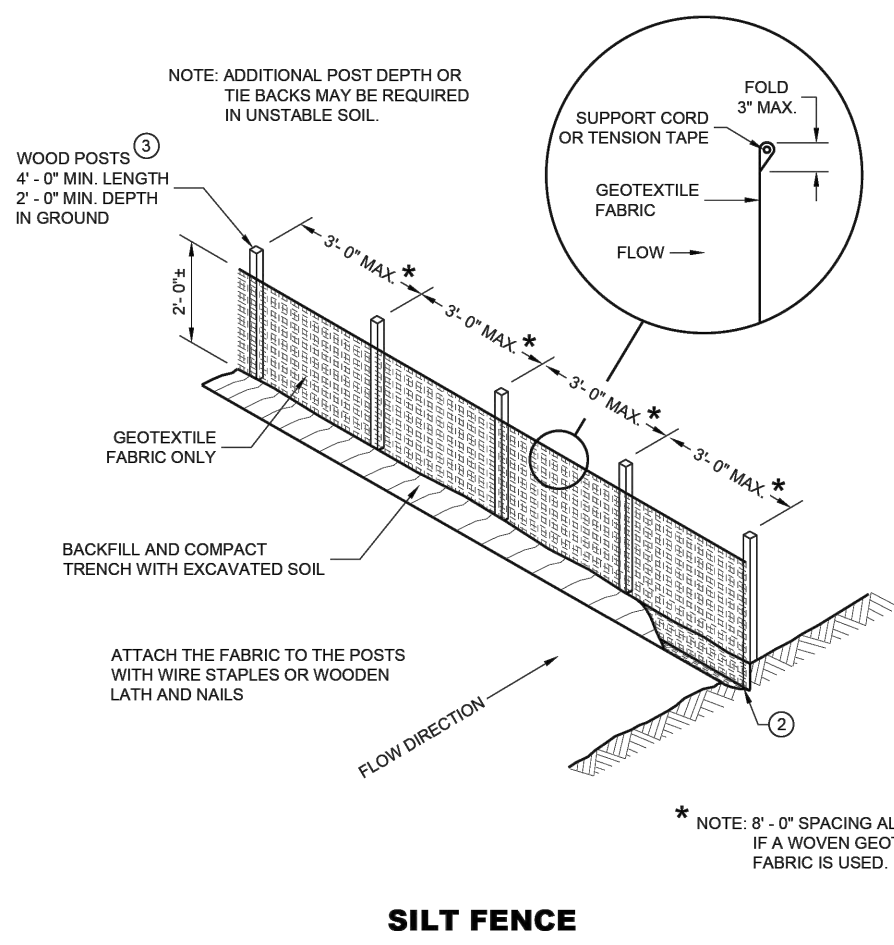
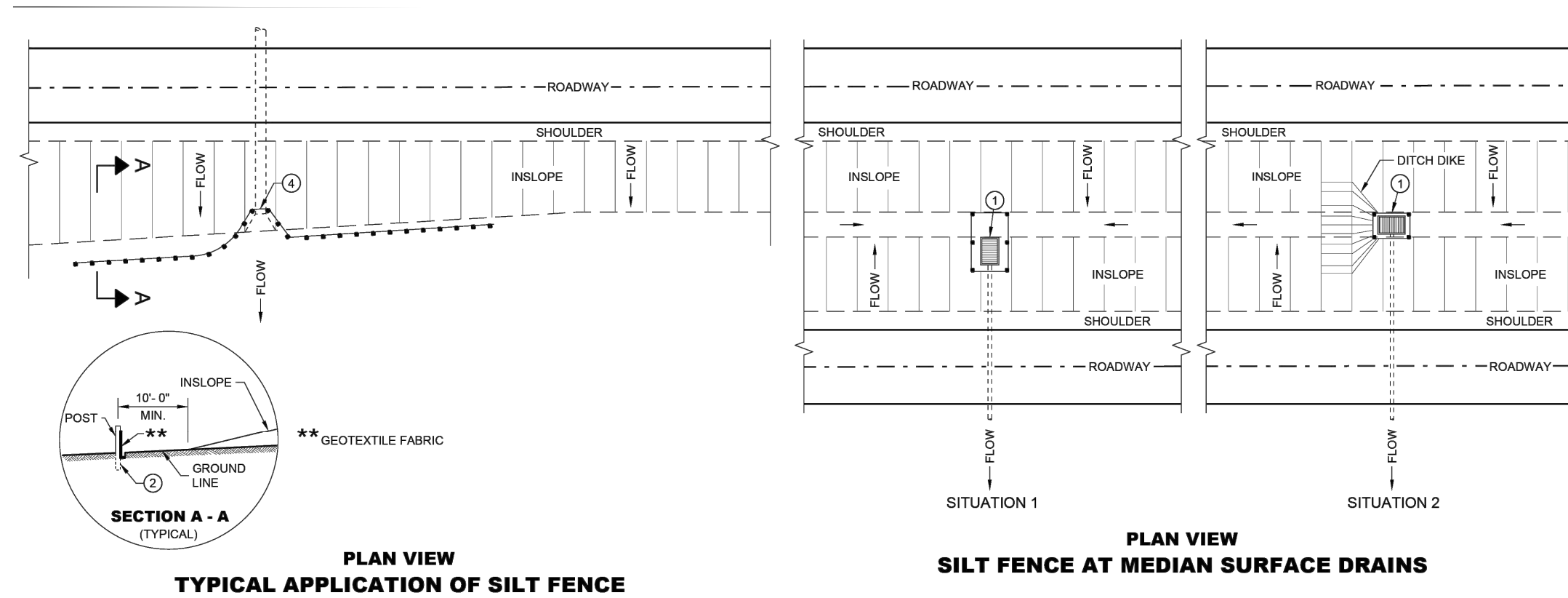
**INSTALLATION NOTES**

- TYPES 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 FAN, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.
- TYPE D**  
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.  
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.  
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 CRUSH 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.

DETAIL 2  
INLET PROTECTION  
NOT TO SCALE



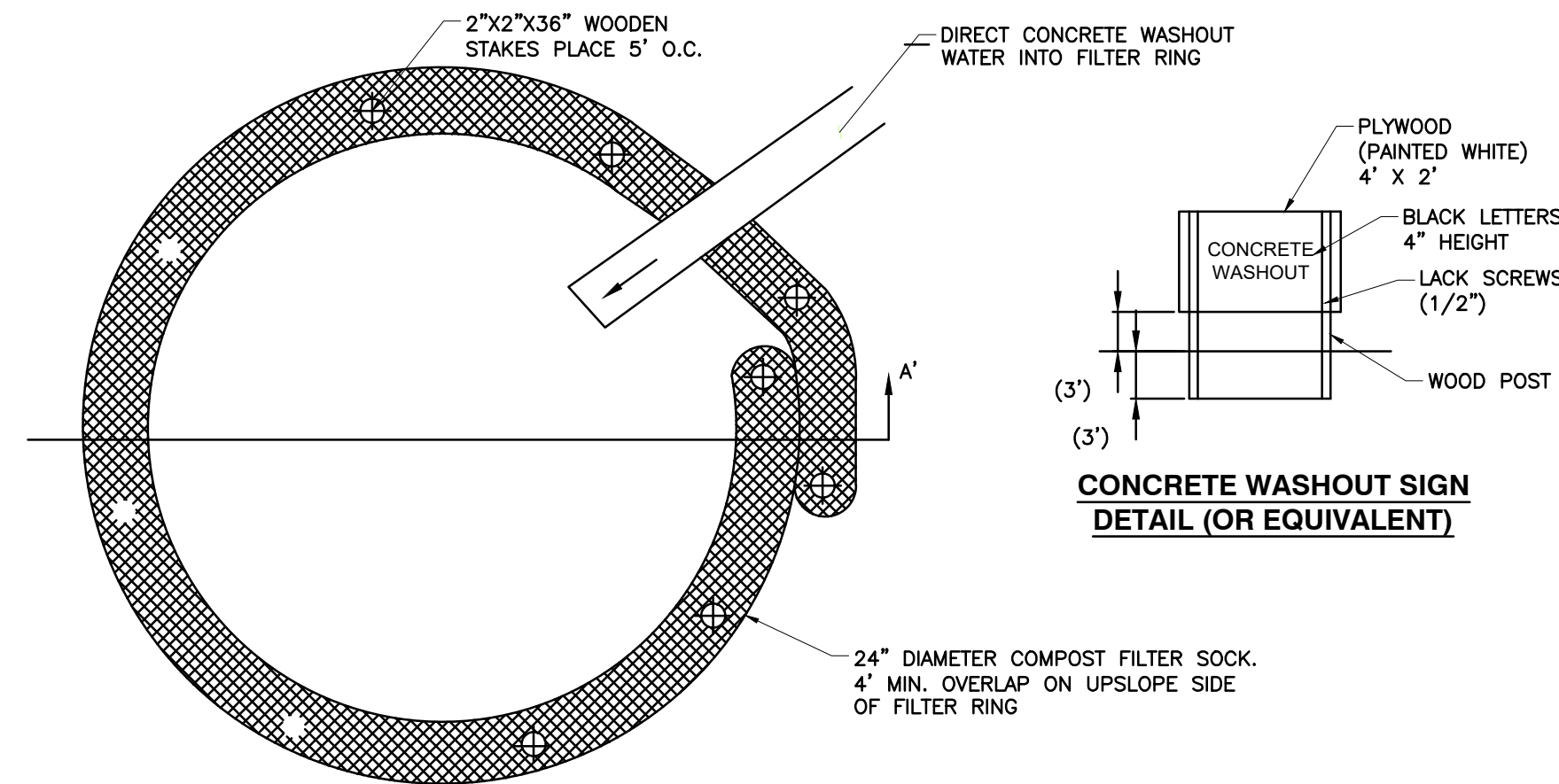
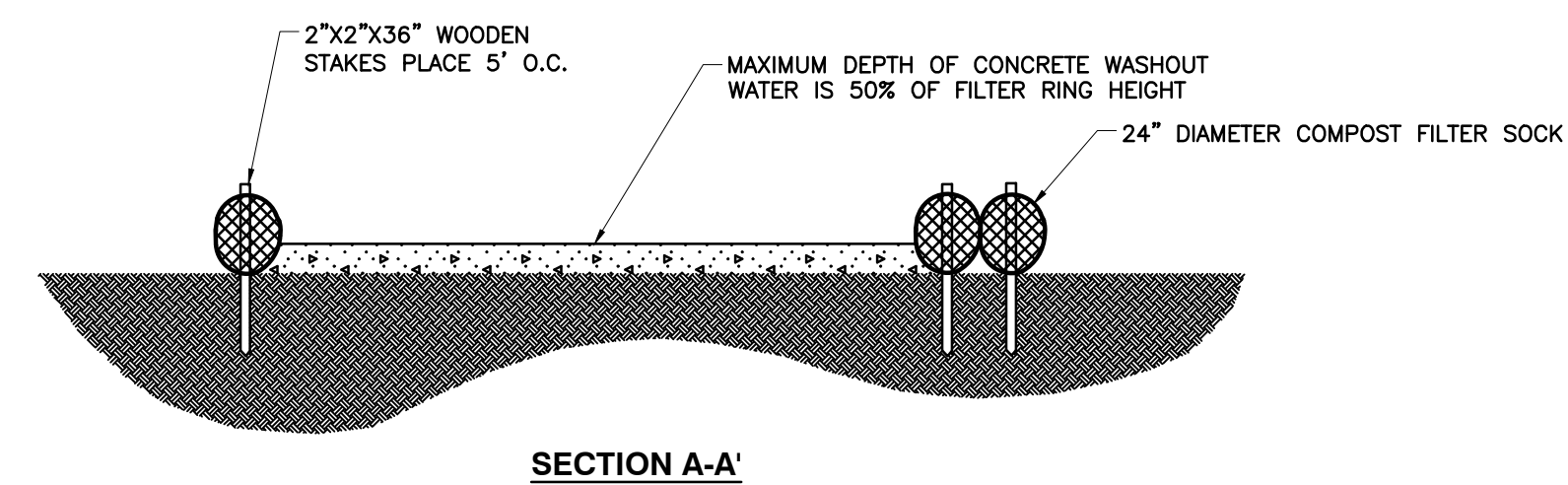
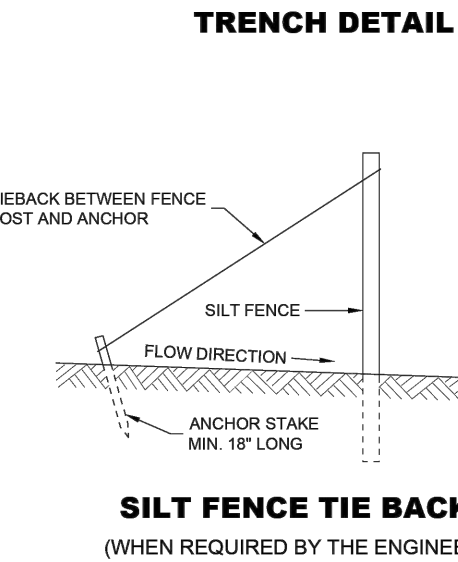
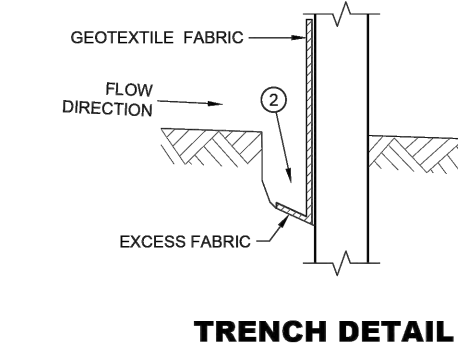
PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING GAS, WATER, BROADBAND, PHONE, SANITARY AND STORM SEWERS. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND APPROPRIATE AUTHORITIES.



DETAIL 3  
SILT FENCE DETAIL  
NOT TO SCALE

**GENERAL NOTES**

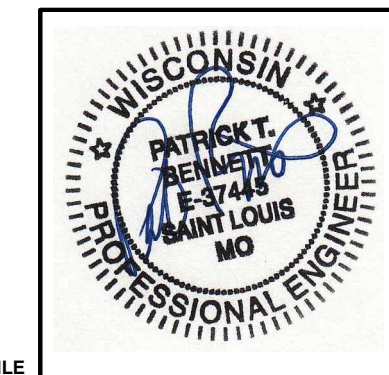
- DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
- 1 HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
  - 2 FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
  - 3 WOOD POSTS SHALL BE A MINIMUM SIZE OF 1X1 X 1X1 OF OAK OR HICKORY.
  - 4 SILT FENCE TO EXTEND ABOVE THE TOP OF THE PIPE.
  - 5 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) OVERLAP THE END POSTS AND TWIST OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



**NOTES:**

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
4. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

DETAIL 4  
TEMPORARY FILTER SOCK CONCRETE WASHOUT FACILITY  
NOT TO SCALE



NO.	DATE	REVISION RECORD	DESCRIPTION

700 Cherrington Parkway  
Moon Township, PA 15108  
Ph: 412.429.2324 - 800.365.2324  
www.cecinco.com

**CECINCO**  
Civil & Environmental  
Consultants, Inc.

**McDONALD'S RESTAURANT**  
NSN (45569) SITE NO (048-1099)  
1221 ERIE AVENUE,  
SHEBOYGAN, WI 53081

**M**

**E&S CONTROL DETAILS**

DATE: 04/20/2025 DRAWN BY: JTC  
DWG SCALE: 1"=20' CHECKED BY: JOW  
PROJECT NO: 357-510  
APPROVED BY: DRAFT

DRAWING NO: **C901**  
SHEET 16 OF 24

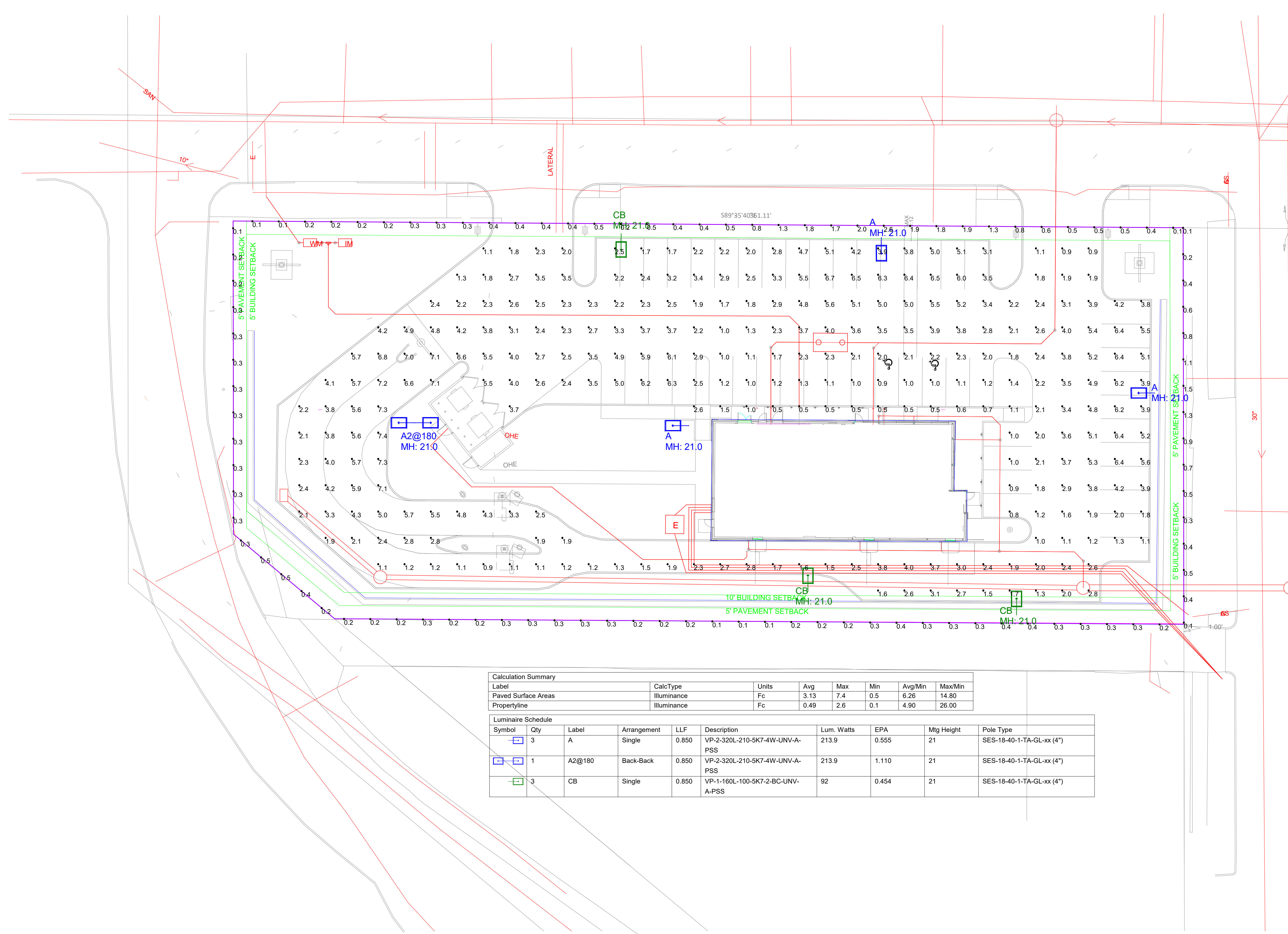
\*HAND SIGNATURE ON FILE





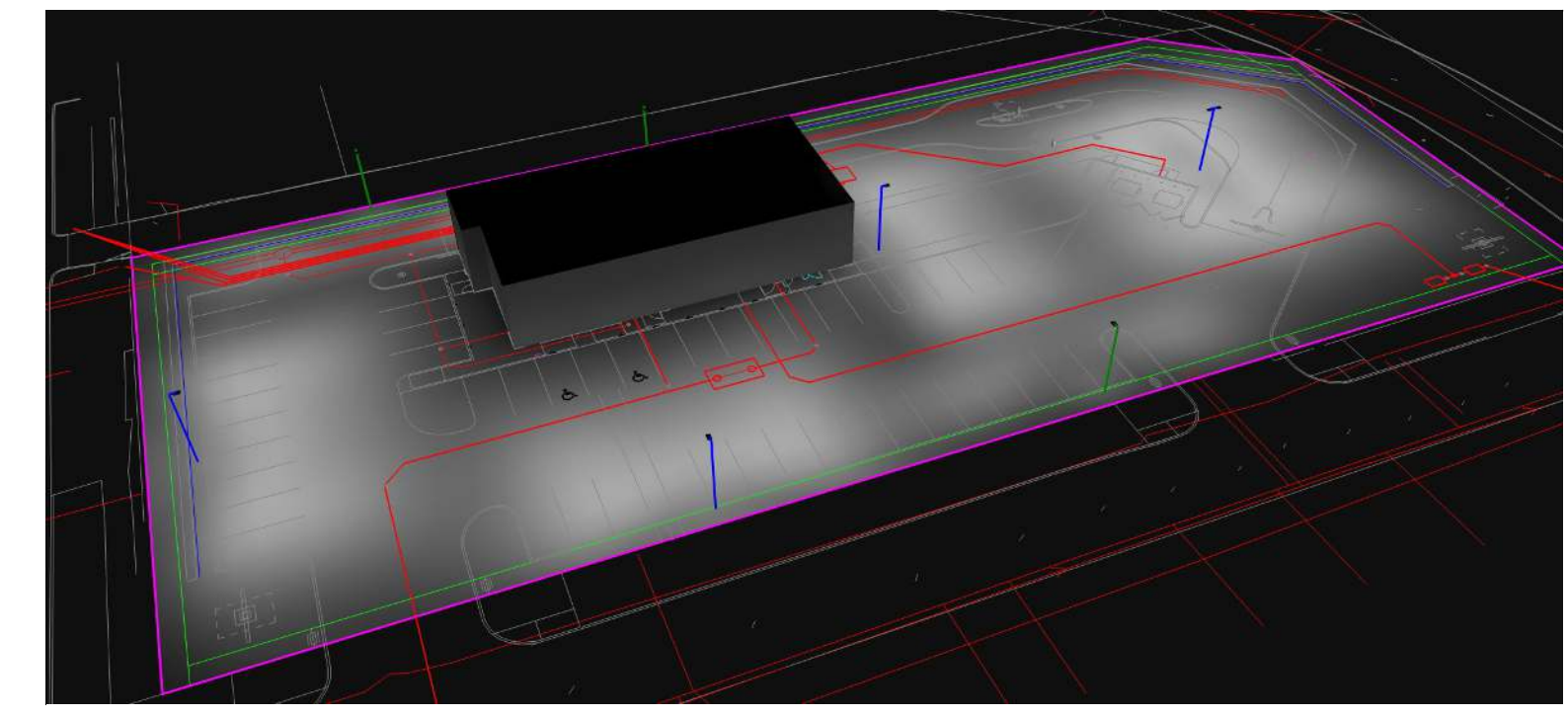






Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Paved Surface Areas	Illuminance	Fc	3.13	7.4	0.5	6.26	14.80
Propertyline	Illuminance	Fc	0.49	2.6	0.1	4.90	26.00

Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	EPA	Mtg Height	Pole Type
[A]	3	A	Single	0.850	VP-2-320L-210-5K7-4W-UNV-A-PSS	213.9	0.555	21	SES-18-40-1-TA-GL-xx (4')
[A2@180]	1	A2@180	Back-Back	0.850	VP-2-320L-210-5K7-4W-UNV-A-PSS	213.9	1.110	21	SES-18-40-1-TA-GL-xx (4')
[CB]	3	CB	Single	0.850	VP-1-160L-100-5K7-2-BC-UNV-A-PSS	92	0.454	21	SES-18-40-1-TA-GL-xx (4')



- NOTES:
1. THE FOOTCANDLE LEVELS AS SHOWN ARE BASED ON THE FOLLOWING CRITERIA. ANY SUBSTITUTIONS IN SPECIFIED FIXTURES OR CHANGES TO LAYOUT WILL AFFECT LIGHTING LEVELS SHOWN AND WILL NOT BE THE RESPONSIBILITY OF SECURITY LIGHTING.
  2. DISTANCE BETWEEN READINGS = 10'

Pole Fixtures Are Full Cutoff  
Tilt=0  
Calculation Grids Are At Grade  
Pole Light Mounting Height=21ft  
(18' Pole + 3' Base)

PROJECT WIND LOAD CRITERIA BASED ON:  
ASCE 7-10 WIND SPEEDS (3-SEC PEAK GUST MPH)  
50 YEAR MEAN RECURRENCE INTERVAL  
ALLOWED EPA 13.6 @ WIND LOAD 90 MPH



Regional Drawing  
# 048-1099

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES	
SCALE	1"=20' 0"
DRAWN BY	CLB
POINT-BY-POINT FOOTCANDLE PLOT FOR MCDONALDS 1221 Erie Avenue, Sheboygan, WI 53081	
NATIONAL STORE NUMBER	45569
DATE	4/17/2026
DRAWING NUMBER	A260661A.AGI

THIS DRAWING MEETS OR EXCEEDS MCDONALDS CURRENT ILLUMINATION SPECIFICATIONS OF A 3-4 FOOTCANDLE AVERAGE, UNLESS SUPERSEDED BY OTHER REQUIREMENTS.

1. THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS TO SECURITY LIGHTING SYSTEMS. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.  
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.  
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.  
4. THIS LAYOUT MAY NOT MEET TITLE 24 OR LOCAL ENERGY REQUIREMENTS. IF THIS LAYOUT NEEDS TO BE COMPLIANT WITH TITLE 24 OR OTHER ENERGY REQUIREMENTS, PLEASE CONSULT FACTORY WITH SPECIFIC DETAILS REGARDING PROJECT REQUIREMENTS SO THAT REVISIONS MAY BE MADE TO THE DRAWING.