

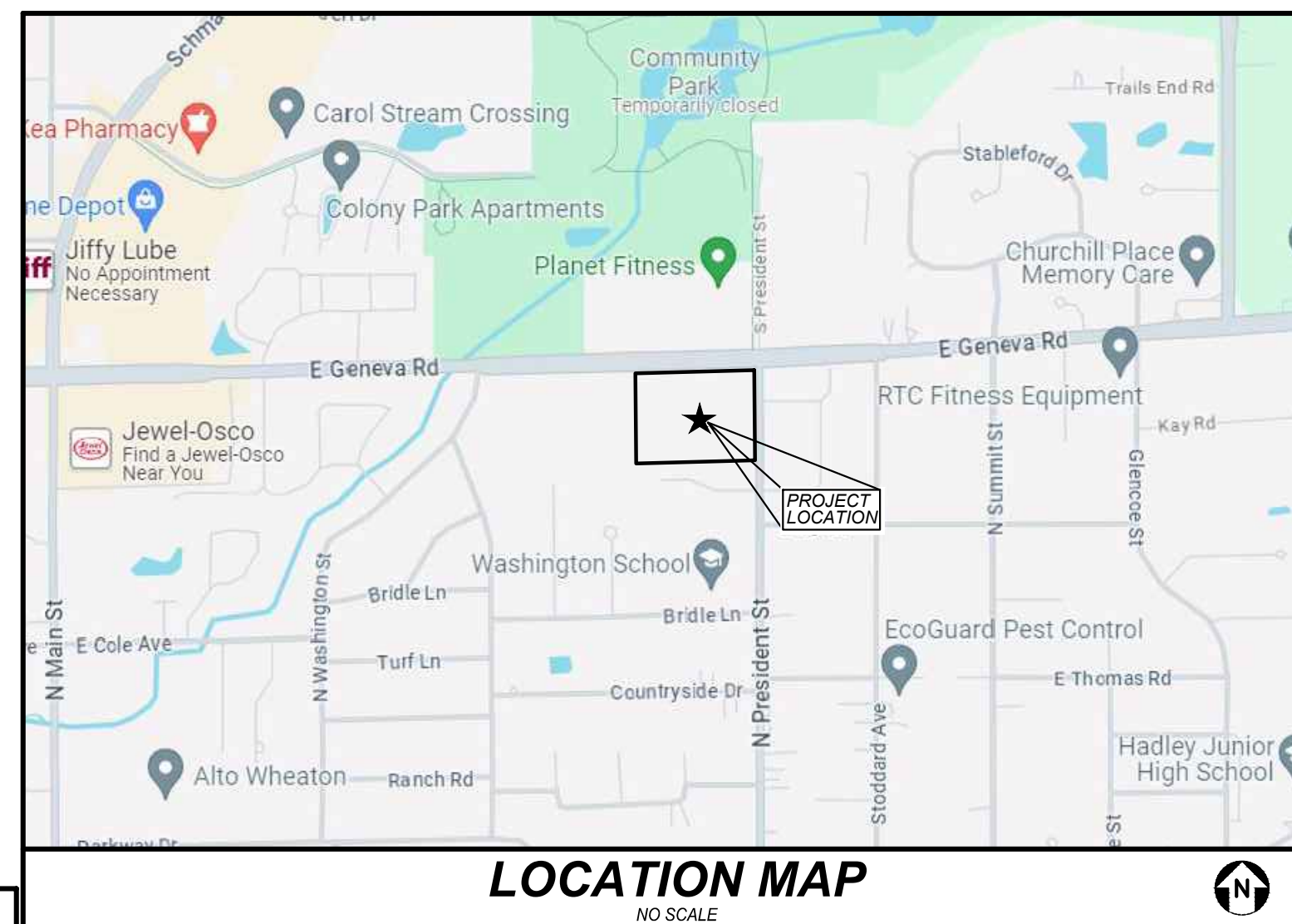
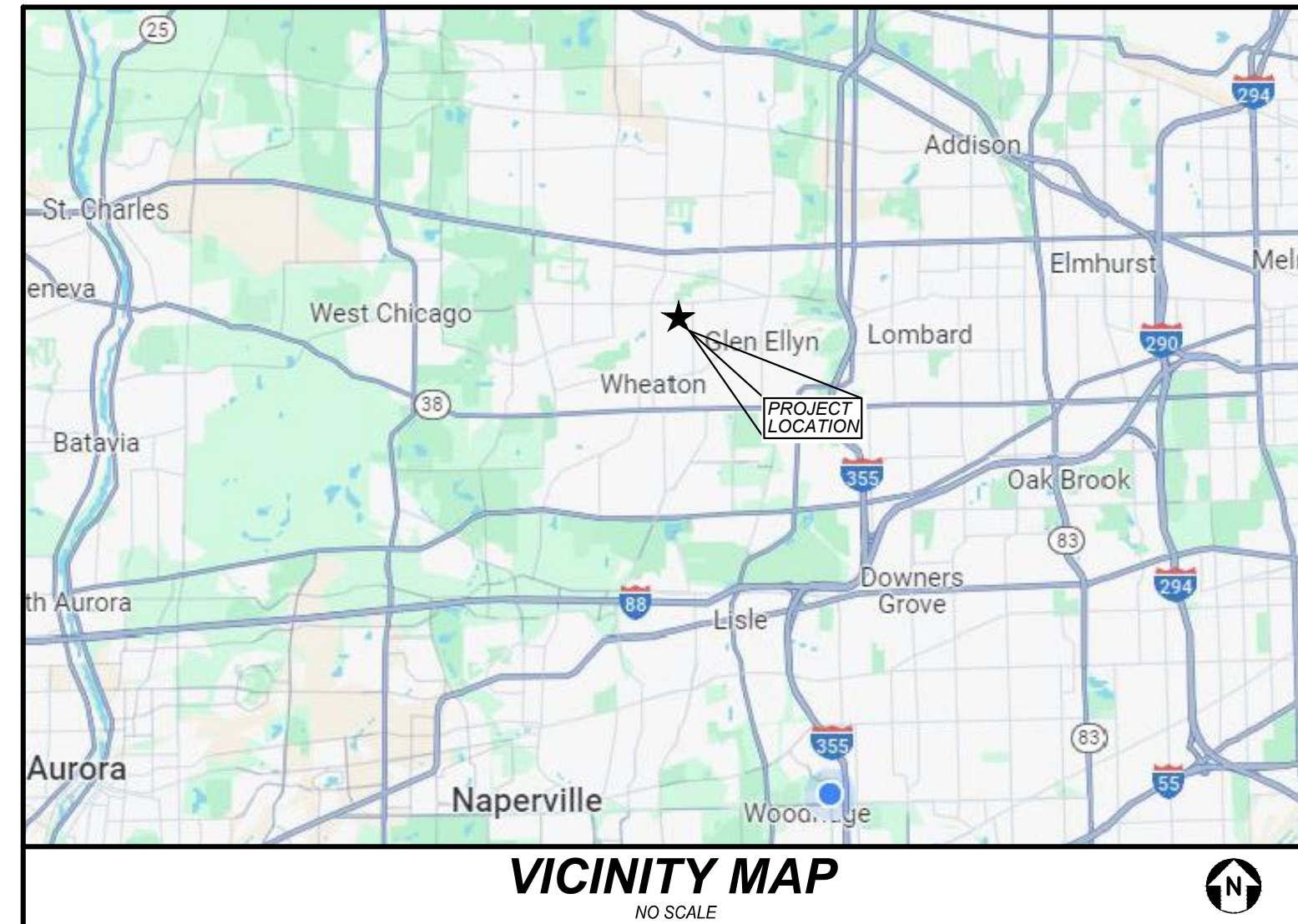
FINAL ENGINEERING PLANS

FOR

ISLAMIC CENTER OF WHEATON

WHEATON, ILLINOIS

PROJECT TEAM
<p style="text-align: center;"><i>OWNER/DEVELOPER</i></p> <p style="text-align: center;">Islamic Center of Wheaton 900 East Geneva Road Wheaton, Illinois 60187 630 523 2399 Contact: Mohammad Shabbir Hassan</p>
<p style="text-align: center;"><i>ENGINEER</i></p> <p style="text-align: center;">V3 Companies, Ltd. 7325 Janes Avenue Woodridge, Illinois 60517 630 724 9200 Project Manager: Lisa Cassaidy, P.E. lcassaidy@v3co.com</p>



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BENCHMARKS
<p>REFERENCE BENCHMARK</p> <p>DuPage COUNTY BENCHMARK:</p> <p>STATION NO.: 0173 NAVD 88 DATUM, 2nd ORDER-CLASS I, ELEV. = 766.46 FT. STATION IS LOCATED ALONG THE WEST SIDE OF PRESIDENT STREET, NORTH OF THE "T" INTERSECTION WITH ST. CHARLES ROAD. STATION IS 56.40 FT. WEST OF THE CENTERLINE OF PRESIDENT STREET, 51.0 FT NORTH OF THE CENTERLINE OF THE ILLINOIS PRAIRIE PATH WESTERN TRAIL, AND 110.0 FT SOUTHWEST OF A FIRE HYDRANT. MONUMENT IS A 2.5 INCH BRASS DISK ON THE NORTH END OF THE WEST HEADWALL FOR DRAINAGE UNDER PRESIDENT STREET. MONUMENT IS 2.0 FT BELOW STREET LEVEL.</p> <p>STATION NO.: M103001 NAVD 88 DATUM, 2nd ORDER-CLASS I, ELEV. = 754.36 FT. STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF ST. CHARLES ROAD AND BLOOMINGDALE ROAD. STATIONS IS 38.10 FT SOUTH OF THE CENTERLINE OF ST. CHARLES ROAD AND 68.90 FT EAST OF THE CENTERLINE OF BLOOMINGDALE ROAD. DISK IS IN THE EAST SIDE OF A 2.50 FT DIAMETER CONCRETE TRAFFIC SIGNAL BASE. MONUMENT IS 0.80 FT ABOVE STREET SURFACE.</p> <p>SITE BENCHMARK</p> <p>TBM-1 1/2" MARKER ON THE WEST SIDE OF THE CONCRETE FOUNDATION LIGHT POLE LOCATED 73.37 FT EAST OF THE SOUTH CORNER OF THE BUILDING. ELEV. = 767.45.</p> <p>TBM-2 "X" MARKER ON THE CONCRETE SIDEWALK LOCATED AT THE SOUTHWEST CORNER OF GENEVA ROAD AND PRESIDENT STREET INTERSECTION. ELEV. = 767.72.</p>

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Joint Utility Locating Information for Excavators

PROFESSIONAL ENGINEER'S CERTIFICATION
<p>I, LISA CASSAIDY, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THE CIVIL ENGINEERING PLANS WERE PREPARED ON BEHALF OF ISLAMIC CENTER OF WHEATON, BY V3 COMPANIES, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.</p> <p>DATED THIS _____ DAY OF _____, A.D., 2025.</p> <p>ILLINOIS LICENSED PROFESSIONAL ENGINEER 062-054453 MY LICENSE EXPIRES ON NOVEMBER 30, 2025</p> <p>ILLINOIS LICENSED DESIGN FIRM NO. 184-000902</p>

<p style="font-size: 24pt; margin: 0;">TITLE SHEET</p> <p style="font-size: 18pt; margin: 0;">ISLAMIC CENTER OF WHEATON</p> <p style="font-size: 12pt; margin: 0;">WHEATON ILLINOIS</p> <p style="font-size: 12pt; margin: 0;">FINAL ENGINEERING</p>	<p style="font-size: 24pt; margin: 0;">C0.0</p>									
<p>PROJECT NO.: 240637</p> <p>PROJECT MANAGER: LC</p> <p>DESIGNED BY: DSBY</p> <p>DRAWN BY: NRS</p>	<p>ORIGINAL ISSUE DATE: 09-04-2024</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 80%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>11-1-24</td> <td>DUPAGE COUNTY DOT REVISIONS</td> </tr> <tr> <td>2</td> <td>1-30-25</td> <td>DUPAGE COUNTY DOT REVISIONS</td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION	1	11-1-24	DUPAGE COUNTY DOT REVISIONS	2	1-30-25	DUPAGE COUNTY DOT REVISIONS
NO.	DATE	DESCRIPTION								
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GENERAL NOTES

- EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:

MANUEL E. PALMA, PLS.
234 BROOKHAVEN DRIVE
ELK GROVE, IL 60007
(773) 294 8758

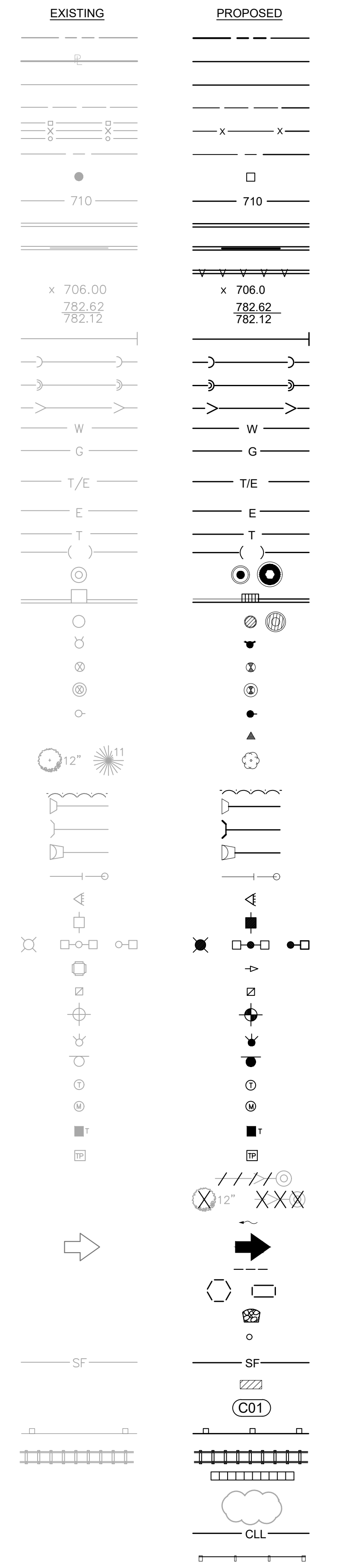
COPIES OF THE SURVEY ARE AVAILABLE FROM THE SURVEYOR. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.
- ALL EXISTING TOPOGRAPHY, UNDERGROUND UTILITIES, STRUCTURES AND ASSOCIATED FACILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEREFORE, THEIR LOCATIONS AND ELEVATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES, THE EXISTENCE OF WHICH ARE NOT PRESENTLY KNOWN.
- CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
- ALL APPLICABLE PROVISIONS OF THE CURRENT OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
- THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS V3 COMPANIES LTD., THE MUNICIPALITY, THEIR EMPLOYEES AND AGENTS AND THE OWNER WHILE ACTING WITHIN THE SCOPE OF THEIR DUTIES FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, HIS AGENTS, THE ENGINEER, HIS EMPLOYEES AND AGENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE OWNER OF THE ROADWAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS. ALL TRAFFIC CONTROL WORK SHALL BE DONE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
- EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK PROPOSED HEREON SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY MADE A PART HEREOF:
 - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS PREPARED BY IDOT, LATEST EDITION.
 - "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION.
 - ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS," AS PUBLISHED BY THE IEPA, LATEST EDITION.
 - THE LATEST EDITIONS OF THE MUNICIPAL CODE AND STANDARDS OF THE VILLAGE OF WHEATON.
 - THE NATIONAL ELECTRIC CODE.
 - THE ILLINOIS ACCESSIBILITY CODE.
 - CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) REQUIREMENTS AS PUBLISHED BY THE IEPA. TESTING OF SOILS BEING EXPORTED FROM THE SITE AND APPROPRIATE DISPOSAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

IN THE EVENT OF CONFLICTING SPECIFICATIONS WITH REGARD TO SITE WORK ISSUES DESIGNED BY THE ENGINEER, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- THE CONTRACTOR SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO COMMENCING ANY WORK AND FOR ANY NEW CONSTRUCTION REQUIRING INSPECTION.
- ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION AND SHALL BE PROTECTED PER IDOT STANDARDS. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES IDENTIFIED TO REMAIN SHALL BE PROTECTED FROM DAMAGE INCLUDING TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.
- CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT ACCUMULATION OF MUD OR SOIL ON PUBLIC THOROUGHFARES. AT THE END OF EACH DAY AND AS OFTEN AS OTHERWISE NECESSARY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION AND AS DETAILED IN THE STORM WATER POLLUTION PREVENTION PLAN.

- THE CONTRACTOR SHALL PROVIDE FOR THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS WHERE HIS/HER OPERATIONS ABOUT PUBLIC THOROUGHFARES AND ADJACENT PROPERTY IN ACCORDANCE WITH THE VILLAGE OF WHEATON MUNICIPAL CODE AND IDOT REQUIREMENTS.
- NO HOLES ARE TO BE LEFT OPEN IN THE PAVEMENT OR PARKWAY OVER A HOLIDAY, WEEKEND OR AFTER 3:00 P.M. ON THE DAY PRECEDING A HOLIDAY OR A WEEKEND.
- ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT ALONG LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF PAVEMENT REMOVAL.
- REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AS PART OF THE BASE CONTRACT.
- NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.
- FOR REGULATED UTILITY LOCATIONS, THE CONTRACTOR SHALL CONTACT THE JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS, "J.U.L.I.E." AT 1-800-892-0123. LOCAL GOVERNMENT AGENCIES SHOULD BE CONTACTED BY THE CONTRACTOR FOR LOCATION OF ALL NONREGULATED UTILITY LOCATIONS. CALL FOR LOCATES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
- BEFORE EXCAVATING OVER OR ADJACENT TO ANY EXISTING UTILITIES, CONTRACTOR SHALL NOTIFY THE OWNER OF SUCH UTILITIES TO ENSURE THAT PROTECTIVE WORK WILL BE COORDINATED AND PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER OF THE UTILITY INVOLVED. IF ANY EXISTING SERVICE LINES, UTILITIES AND UTILITY STRUCTURES WHICH ARE TO REMAIN IN SERVICE ARE UNCOVERED OR ENCOUNTERED DURING THIS OPERATION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE AND SUPPORTED IF NECESSARY.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL AS DETAILED IN THE STORM WATER POLLUTION PREVENTION PLAN.
- ALL CURB RADII REFER TO BACK OF CURB. UNLESS OTHERWISE NOTED.
- ANY AREAS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO CONFORMANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND SHALL BE INCIDENTAL TO THE CONTRACT.
- STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND IF DAMAGED, SHALL BE REPLACED PROMPTLY IN CONFORMANCE WITH THE VILLAGE OF WHEATON MUNICIPAL OR IDOT STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
- PROPOSED ELEVATIONS INDICATE FINISHED CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THICKNESS OF PROPOSED PAVING (ROADS, WALKS, DRIVES, ETC.) OR TOPSOIL AS INDICATED ON DRAWINGS.
- CAD FILES ARE AVAILABLE FOR CONSTRUCTION LAYOUT UPON REQUEST.
- BACKFILL SHALL BE PLACED NEXT TO THE CURB AS SOON AS PERMISSIBLE AFTER CONSTRUCTION TO PREVENT SCOURING AND UNDERCUTTING BY STORM WATER RUNOFF.
- BUTT JOINTS SHALL BE PROVIDED WHEREVER NEW PAVEMENT ABUTS EXISTING PAVEMENT. ALL BUTT JOINTS SHALL BE CONSTRUCTED BY MILLING AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE BITUMINOUS SURFACE COURSE.
- WHEN AN EXISTING DRAINAGE ROUTE, EITHER A STORM SEWER OR WATERWAY, IS INTERRUPTED DUE TO CONSTRUCTION, THE DRAINAGE ROUTE SHALL BE REESTABLISHED TO ORIGINAL CONDITIONS BY THE END OF THE SAME WORK DAY. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES. AVOID RIDGES AND DEPRESSIONS.
- FINAL ADJUSTMENT OF FIRE HYDRANTS, VALVE VAULTS AND MANHOLES TO FINISHED GRADE ARE INCIDENTAL TO THEIR COST.
- ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT ARE TO BE ADJUSTED OR RECONSTRUCTED BY THE CONTRACTOR TO THE UTILITY OWNER'S SATISFACTION. ADJUSTMENTS OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND TO THE SATISFACTION OF THE UTILITY OWNER.
- PROVIDE TRENCH BACKFILL IN ACCORDANCE WITH THE DETAILS OF THE PLANS FOR ALL UTILITY LINES (OR AS OTHERWISE NOTED ON PLANS). BACKFILL SHALL BE PLACED AND COMPACTED PER THE VILLAGE OF WHEATON AND IDOT SPECIFICATIONS. COST OF BACKFILL IS TO BE CONSIDERED INCIDENTAL TO THE UTILITY WORK.
- ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- PRIOR TO DEMOBILIZATION, ALL WORK SHALL BE CLEANED AND INSPECTED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

- THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE LAYOUTS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- BAND-SEAL CONNECTORS OR EQUIVALENT SHALL BE USED TO JOIN PIPES OF DISSIMILAR MATERIAL.
- CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL CONSTRUCTION IN CONFORMANCE WITH ALL MUNICIPAL AND CLIENT REQUIREMENTS FOR USE IN PREPARING RECORD DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL A 2"x4"x6" POST ADJACENT TO THE TERMINUS OF UTILITY MAINS AND SERVICE LINES. POSTS SHALL BE MARKED IN ACCORDANCE WITH THE VILLAGE STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ANY EXCAVATION. ANY DEWATERING REQUIRED SHALL BE INCIDENTAL TO THE CONTRACT.
- COPIES OF SOILS INVESTIGATION REPORTS MAY BE OBTAINED FROM THE OWNER. ANY BRACING, SHEETING OR SPECIAL CONSTRUCTION METHODS REQUIRED IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT. ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SUBSOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SUPPLEMENTAL SOILS INVESTIGATION.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER OR EXTENDED TO OUTLET INTO A PROPOSED DRAINAGE WAY AS DETERMINED BY THE ENGINEER. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATIONAL CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE FOR ON-SITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE SUBCONTRACTOR AND SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE PROJECT. ALL FIELD TILE REPAIRS SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
- THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

LEGEND



DESCRIPTION	ABBREVIATIONS
RIGHT-OF-WAY LINE	A ARC LENGTH
PROPERTY LINE (EXTERIOR)	B-B BACK TO BACK OF CURB
LOT LINE (INTERIOR)	B/C BACK OF CURB
EASEMENT LINE	BLDG BUILDING
FENCE LINE	BM BENCHMARK
CENTERLINE	B/P BOTTOM OF PIPE
PROPERTY CORNER	BV/VV BUTTERFLY VALVE IN VALVE VAULT
CONTOUR	C & G CURB AND GUTTER
CURB & GUTTER	CB CATCH BASIN
DEPRESSED CURB & GUTTER	CL CENTERLINE
REVERSE PITCHED CURB	CO CLOSED LID
SPOT ELEVATION	CO CLEAN OUT
TOP OF CURB ELEVATION	DIP DUCTILE IRON PIPE
EDGE OF PAVEMENT ELEVATION	DIA DIAMETER
UTILITY STUB	DIWM DUCTILE IRON WATER MAIN
SANITARY SEWER	DWG DRAWING
SANITARY FORCE MAIN	E EAST OR ELECTRIC OR EDGE
STORM SEWER	EJ EXPANSION JOINT
WATER MAIN	ELEV ELEVATION
GAS MAIN	E/P EDGE OF PAVEMENT
UNDERGROUND TELEPHONE & ELECTRIC DUCT BANK	EX EXISTING
BURIED CABLE-ELECTRIC	F & CL FRAME & CLOSED LID
BURIED CABLE-TELEPHONE	F & G FRAME & GRATE
ATLAS LOCATED UTILITY	F & OL FRAME & OPEN LID
UTILITY STRUCTURE WITH CLOSED LID	FES FLARED END SECTION
CURB INLET	FF FACE TO FACE OF CURB
DRAINAGE STRUCTURE WITH OPEN LID	FF FINISHED FLOOR
FIRE HYDRANT	F/G FINISHED GRADE
VALVE IN VALVE BOX	FH FIRE HYDRANT
GATE VALVE IN VALVE VAULT	F/L FLOW LINE
POST INDICATOR VALVE	G GAS LINE
THRUST BLOCK	GV/VB GATE VALVE IN VALVE BOX
TREE	GV/VV GATE VALVE IN VALVE VAULT
TREE LINE	HDCP HANDICAP
CONCRETE HEADWALL	HDPE HIGH DENSITY POLYETHYLENE PIPE
SUBMERGED HEADWALL	HDW HEADWALL
FLARED END SECTION (F.E.S.)	HOR HORIZONTAL
GUY WIRES	HP HIGH POINT
FLOOD LIGHT	HWL HIGH WATER LEVEL
UTILITY POLE	IE INVERT ELEVATION
LIGHT STANDARD	IN INLET
TRAFFIC SIGNAL POLE	LF LINEAL FEET
HAND HOLE	LP LOW POINT OR LIGHT POLE
SOIL BORING	L LEFT
IRRIGATION HEADS	ME MATCH EXISTING
SIGN	MH MANHOLE
TELEPHONE MANHOLE	MW MONITORING WELL
MONITORING WELL	N NORTH
TELEPHONE PEDESTAL	NIC NOT IN CONTRACT / NOT INCLUDED
TRANSFORMER PAD	NWL NORMAL WATER LEVEL
UTILITY TO BE ABANDONED	OC ON CENTER
FEATURE TO BE REMOVED	OL OPEN LID
STORMWATER FLOW DIRECTION	PC POINT OF CURVATURE
STORMWATER OVERFLOW ROUTE	PCC PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND CURVE
DITCH CHECK	PGL PROFILE GRADE LINE
INLET FILTER BASKET	PI POINT OF INTERSECTION
RIP RAP	PL PROPERTY LINE
BOLLARD	PP POWER POLE
SILT FENCE	PRC POINT OF REVERSE CURVATURE
WATER MAIN PROTECTION	PT POINT OF TANGENCY
UTILITY CROSSING LABEL	PUE PUBLIC UTILITY EASEMENT
GUARDRAIL	PVC POINT OF VERTICAL CURVATURE OR POLYVINYL CHLORIDE PIPE
RAILROAD TRACKS	PVI POINT OF VERTICAL INTERSECTION
RETAINING WALL	PVT POINT OF VERTICAL TANGENCY
REVISION DELINEATION	R RADIUS OR RIGHT
CONSTRUCTION LIMIT LINE	RCP REINFORCED CONCRETE PIPE
TREE PROTECTION FENCE	ROW RIGHT OF WAY
	S SLOPE OR SOUTH
	SAN SANITARY
	SF SILTATION FENCE
	SFM SANITARY FORCE MAIN
	SHT SHEET
	SHW SUBMERGED HEADWALL
	SMH SANITARY MANHOLE
	STA STATION
	ST STORM STRUCTURE OR STORM SEWER
	STMH STORM MANHOLE
	T TANGENT LENGTH OR TELEPHONE
	T/C TOP OF CURB
	T/P TOP OF PIPE
	T/W TOP OF WALL
	TY TYPE
	TYP TYPICAL
	UP UTILITY POLE
	VC VERTICAL CURVE
	VERT VERTICAL
	VCP VITRIFIED CLAY PIPE
	W WEST
	WM WATER MAIN

PROJECT NO.: 240637 PROJECT MANAGER: LC DESIGNED BY: DSBY DRAWN BY: NRS	ORIGINAL ISSUE DATE: 09-04-2024	REVISIONS
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GENERAL NOTES, LEGEND, & ABBREVIATIONS		
ISLAMIC CENTER OF WHEATON ILLINOIS WHEATON FINAL ENGINEERING		
7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com		
DRAWING NO. C1.0		

SPECIFICATIONS

EARTHWORK

1. THE GRADING OPERATIONS ARE TO BE INSPECTED BY A THIRD PARTY SOILS ENGINEER. THE CONTRACTOR'S REPRESENTATIVE MUST BE NOTIFIED PRIOR TO ANY UNSUITABLE SOIL REMOVAL AND MUST APPROVE, IN WRITING, ANY REMEDIATION. BOTH THE CONTRACTOR AND SOILS ENGINEER MUST BE PRESENT DURING REMEDIATION.
2. THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADE. A MINIMUM OF 6 INCHES OF TOPSOIL IS TO BE PLACED BEFORE FINISH GRADE. ELEVATIONS ARE ACHIEVED, UNLESS OTHERWISE NOTED. AREAS IN DETENTION FACILITIES NOTED TO BE ESTABLISHED WITH NATIVE VEGETATION SHALL REQUIRE A MINIMUM OF 12 INCHES OF TOPSOIL. REFER TO PLANTING PLANS TO VERIFY TOPSOIL THICKNESS REQUIREMENTS.
3. THE SURFACE VEGETATION, TOPSOIL, TRANSITIONAL MATERIAL, AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHALL BE STRIPPED FROM ALL AREAS TO RECEIVE STRUCTURAL FILL. IF THE UNDERLYING SUBGRADE IS FOUND TO BE UNSUITABLE FOR PROPER COMPACTION, CONTRACTOR TO CONSULT WITH SOILS ENGINEER PRIOR TO REMEDIATION.
4. EMBANKMENT MATERIAL WITHIN ROADWAY, DRIVEWAY, BUILDING AND OTHER STRUCTURAL CLAY FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D1557 (MODIFIED PROCTOR METHOD), OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER, THE AUTHORITY HAVING JURISDICTION, AND THE CONTRACTOR.
5. ALL PAVEMENT SUBGRADE SHALL MEET THE REQUIREMENTS DETERMINED BY THE SOILS ENGINEER AND DOCUMENTED IN THE GEOTECHNICAL REPORT. IF AREAS OF PAVEMENT SUBGRADE ARE ENCOUNTERED WHICH DO NOT MEET THESE REQUIREMENTS, SUBGRADE REPLACEMENT OR PAVEMENT DESIGN REVISIONS SHALL BE PROVIDED WHICH ARE ADEQUATE TO OBTAIN EQUIVALENT PAVEMENT STRENGTH AS DETERMINED BY THE ENGINEER, SOILS ENGINEER, AND THE AUTHORITY HAVING JURISDICTION.
6. COMPLETED GRADING (FINISHED FINE GRADE) FOR PROPOSED PAVEMENT SUBGRADE AREAS, BUILDING PADS, AND OPEN SPACE AREAS SHALL BE WITHIN A 0.1' TOLERANCE OF DESIGN SUBGRADE.
7. THE SUBGRADE FOR PROPOSED STREET AND PAVEMENT AREAS SHALL BE PROOF-ROLLED BY THE SUBCONTRACTOR IN THE PRESENCE OF THE JURISDICTIONAL INSPECTOR, CONTRACTOR, AND SOILS ENGINEER.
8. BORROW PIT LOCATION(S) SHALL BE APPROVED BY THE OWNER, ENGINEER, AND GEOTECHNICAL ENGINEER.

STORM SEWER

1. STORM SEWERS SHALL BE CONSTRUCTED OF THE FOLLOWING MATERIALS AS SPECIFIED ON THE PLANS:
 - A. REINFORCED CONCRETE PIPE (RCP) IN CONFORMANCE WITH IDOT STANDARD SPECIFICATIONS DETERMINATION FOR PIPE CLASS, AND CONFORMING TO ASTM C76. ALL STORM SEWER SHALL HAVE GASKETED JOINTS CONFORMING TO ASTM C-361, UNLESS OTHERWISE NOTED.
 - B. POLYVINYL CHLORIDE PLASTIC SEWER PIPE (PVC) CONFORMING TO ASTM D3034 WITH ELASTOMERIC GASKETED JOINTS CONFORMING TO ASTM D3212.
 - C. HIGH DENSITY POLYETHYLENE PIPE, HDPE, CONFORMING TO ASTM D3350 WITH ELASTOMERIC JOINTS CONFORMING TO ASTM D3212.
 - D. DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A21.51 (AWWA C151) WITH JOINTS CONFORMING TO ANSI 21-11 (AWWA C-111).
2. STORM SEWER STRUCTURES SHALL BE PRECAST OF THE TYPE AND DIAMETER AS SPECIFIED IN THE PLANS WITH APPROPRIATE FRAME AND LIDS (SEE CONSTRUCTION DETAIL). LIDS SHALL BE IMPRINTED "STORM".

PAVING

1. BASE COURSE SHALL BE AGGREGATE BASE COURSE, CONFORMING TO IDOT STANDARD SPECIFICATIONS (SEE PLANS FOR THICKNESS).
2. SURFACE COURSE AND BINDER COURSE SHALL BE HOT-MIX ASPHALT (HMA) CONFORMING TO IDOT STANDARD SPECIFICATIONS (SEE PLANS FOR THICKNESS).
3. CURB & GUTTER AND SIDEWALK SHALL BE CLASS SI PORTLAND CEMENT CONCRETE CONFORMING TO IDOT STANDARD SPECIFICATIONS.
4. SUBGRADE SHALL BE FINISHED TO BE WITHIN 0.1 FEET OF DESIGN SUBGRADE ELEVATIONS BY THE EARTHWORK CONTRACTOR. FINE GRADING FOR PAVEMENTS AND SIDEWALKS SHALL BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR.
5. AGGREGATE BASE COURSES SHALL BE PRIMED AT THE RATE OF 0.25 TO 0.50 GALLONS PER SQUARE YARD AND

BRICK, CONCRETE, OR HMA BASES SHALL BE PRIMED AT THE RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD WITH LIQUID ASPHALT CONFORMING TO THE IDOT STANDARD SPECIFICATIONS AND APPROPRIATE FOR PREVAILING WEATHER AND SITE CONDITIONS. PRIME COAT AND CLEANING THE EXISTING SURFACE SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

6. PAVEMENT SHALL BE CONSTRUCTED ON A THOROUGHLY COMPACTED SUBGRADE MEETING THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. PRIOR TO PLACEMENT OF THE NEW PAVEMENT, THE SUBGRADE SHALL BE PROOF ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK (MINIMUM 20 TONS). PROOF ROLLING SHALL BE WITNESSED BY THE GEOTECHNICAL CONSULTANT.
7. SIDEWALKS SHALL BE OF THE THICKNESS AND DIMENSIONS AS SHOWN IN THE CONSTRUCTION PLANS. CONTRACTION JOINTS SHALL BE SET AT 5' CENTERS AND ½ INCH PREMOULDED FIBER EXPANSION JOINTS SHALL BE SET AT 50' CENTERS AND WHERE THE SIDEWALK MEETS THE CURB, A BUILDING, OR AT THE END OF EACH POUR, ALL SIDEWALKS CONSIDERED TO BE ACCESSIBLE ROUTES AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT (ADA) SHALL BE SUBJECT TO ILLINOIS ACCESSIBILITY CODE (IAC) REQUIREMENTS, UNLESS OTHERWISE NOTED.
8. TESTING OF THE SUBBASE, BASE COURSE, BINDER COURSE, SURFACE COURSE, AND CONCRETE WORK SHALL BE REQUIRED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE SPECIFIC REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. A QUALIFIED TESTING FIRM SHALL BE EMPLOYED TO PERFORM THE REQUIRED TESTS.
9. ASPHALT JOINTS FOR BINDER AND SURFACE COURSES ARE TO BE STAGGERED.

REVISIONS

NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS
2	1-30-25	DUPAGE COUNTY DOT REVISIONS

PROJECT NO.: 240637

PROJECT MANAGER: LC

DESIGNED BY: DSBY

DRAWN BY: NRS

ORIGINAL ISSUE DATE: 09-04-2024

SPECIFICATIONS

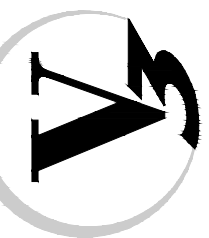
ISLAMIC CENTER OF WHEATON

FINAL ENGINEERING

ILLINOIS

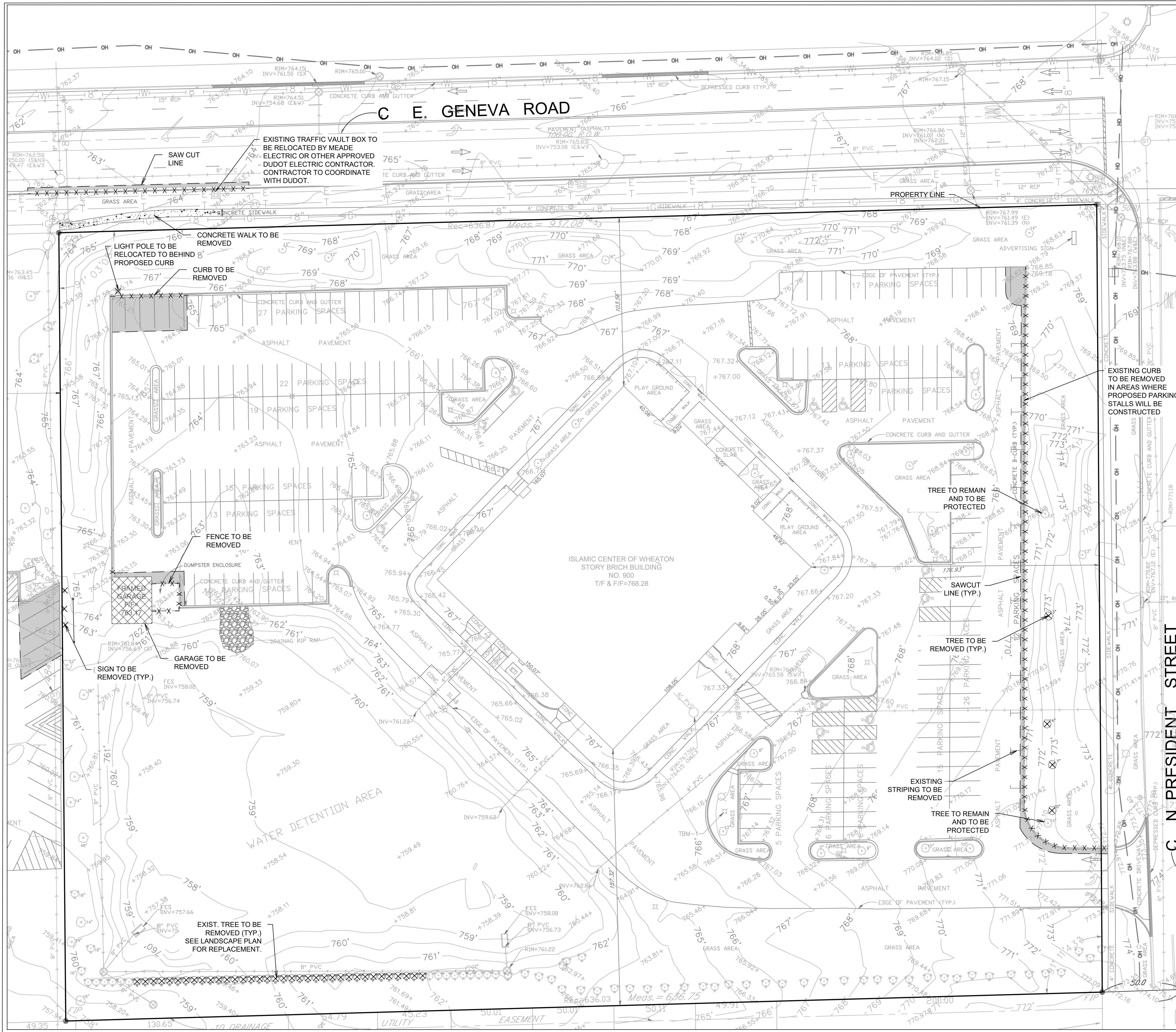
WHEATON

7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
www.v3co.com



DRAWING NO.

C1.1



DEMOLITION PLAN

- THE EXTENT OF DEMOLITION WORK IS AS GENERALLY SHOWN ON THE CONSTRUCTION DOCUMENTS. SPECIFIC DEMOLITION PROCESSES OR PROCEDURES FOR DEMOLITION AND STRUCTURAL CONSIDERATIONS ARE THE RESPONSIBILITY OF OTHERS. DEMOLITION INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND DISPOSAL OFFSITE OF THE FOLLOWING ITEMS:
 - SIDEWALK AND ON-SITE PAVEMENT
 - UTILITIES
 - CONSTRUCTION DEBRIS
- ALL PAVEMENT TO BE REMOVED ADJACENT TO PAVEMENT THAT IS TO REMAIN SHALL BE SAWCUT FULL DEPTH AT THE EDGES PRIOR TO REMOVAL TO OBTAIN A "CLEAN" JOINT WHERE IT ABUTS NEW CURB OR PAVEMENT.
- CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.
- STRUCTURES TO BE DEMOLISHED SHALL BE VACATED AND DISCONTINUED FROM USE PRIOR TO START OF WORK. OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITION OF STRUCTURES TO BE DEMOLISHED. CONDITIONS EXISTING AT TIME OF INSPECTION FOR BIDDING PURPOSES WILL BE MAINTAINED BY OWNER IN SO FAR AS PRACTICABLE. HOWEVER, VARIATIONS WITHIN THE STRUCTURES MAY OCCUR BY OWNER'S REMOVAL AND SALVAGE OPERATIONS PRIOR TO START OF DEMOLITION WORK.
- ITEMS OF SALVAGEABLE VALUE TO CONTRACTOR MAY BE REMOVED AS WORK PROGRESSES AND AS APPROVED BY THE OWNER. SALVAGED ITEMS MUST BE TRANSPORTED FROM THE SITE AS THEY ARE REMOVED. STORAGE OR SALE OF REMOVED ITEMS ON SITE WILL NOT BE PERMITTED.
- CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT FACILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF BUILDINGS, PAVEMENTS AND UTILITIES TO REMAIN FROM ANY DAMAGE AND SHALL BE RESPONSIBLE FOR REPAIRING THE SAME.
- EXISTING UTILITIES, WHICH DO NOT SOLELY SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL REMOVE ALL UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS.
- EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FA-1 OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO HAVE THEIR TRENCHES BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY.
- ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.
- CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- REMOVAL, ABANDONMENT, AND RELOCATION OF EXISTING UTILITIES SHALL BE COMPLETED AS GENERALLY DEPICTED ON THESE PLANS. CONTRACTOR TO COORDINATE RELOCATIONS WITH THE UTILITY OWNER. CONTRACTOR SHALL MINIMIZE DISRUPTION OF SERVICE AND SHALL WORK WITH UTILITY OWNER TO MAINTAIN AN ACCEPTABLE LEVEL OF SERVICE.
- USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO MINIMIZE DUST AND DIRT FROM RISING AND SCATTERING IN THE AIR. COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- DEMOLITION DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE IDOT APPROVED AGGREGATE (CA-6) OR APPROVED EQUAL.
- SEE LANDSCAPE PLANS FOR INFORMATION ON LANDSCAPE AND TREE PROTECTION, PRESERVATION, AND REMOVAL.
- EXISTING MONITORING WELLS ARE TO BE REMOVED AS NECESSARY AND SEALED BY STATE LICENSED WELL DRILLER PER ILLINOIS DEPARTMENT OF PUBLIC HEALTH REQUIREMENTS AND/OR LOCAL/COUNTY REQUIREMENTS.
- THESE DRAWINGS DO NOT INCLUDE THE REMOVAL OF UNDERGROUND STORAGE TANKS. SHOULD UNDERGROUND STORAGE TANKS BE ENCOUNTERED, CONTRACTOR TO CONTACT OWNER AND ENGINEER TO DETERMINE RESPONSIBILITY FOR ANY ENVIRONMENTAL REMEDIATION OR REMOVAL WORK AS NECESSARY. ANY REMOVAL OF UNDERGROUND STORAGE TANKS MUST BE IN CONFORMANCE WITH LOCAL AND STATE STANDARDS.

DEMOLITION LEGEND

- ASPHALT PAVEMENT REMOVAL (FULL DEPTH)
- CONC. CURB/GUTTER OR UTILITY LINE TO BE REMOVED
- STRUCTURE/TREE TO BE REMOVED
- SAWCUT LINE

GRAPHIC SCALE
1" = 30'

REVISIONS		NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS		
2	1-30-25	DUPAGE COUNTY DOT REVISIONS		

PROJECT NO.:	240637
PROJECT MANAGER:	LC
DESIGNED BY:	DSBY
DRAWN BY:	NRS

ORIGINAL ISSUE DATE:	09-04-2024
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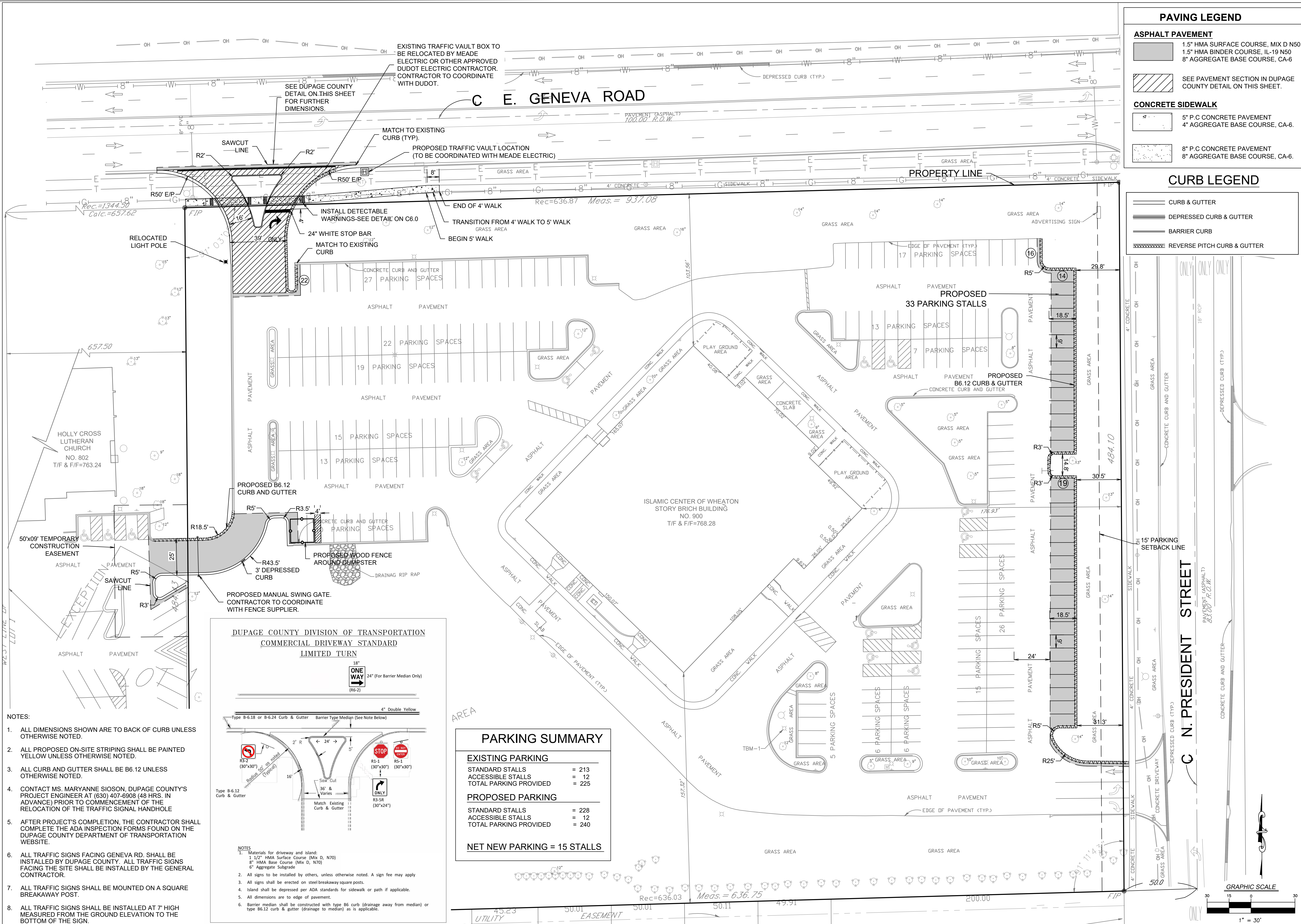
DEMOLITION PLAN

ISLAMIC CENTER OF WHEATON

WHEATON ILLINOIS

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DRAWING NO.
C2.0

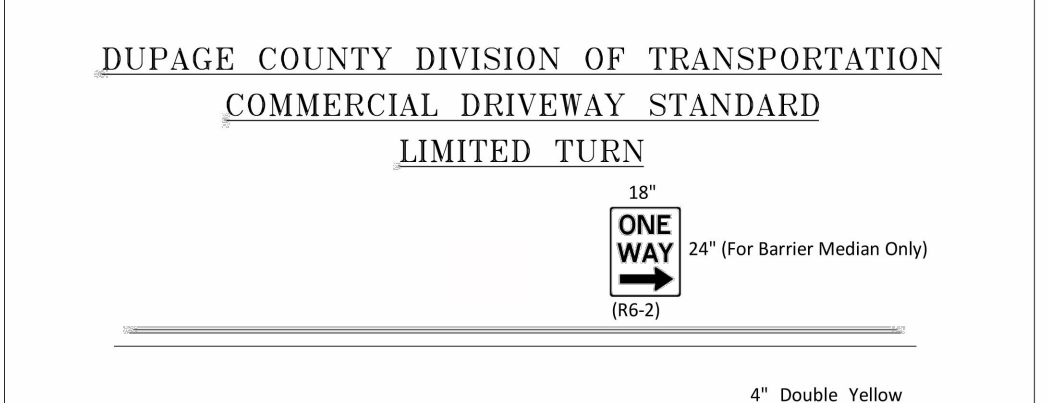


PAVING LEGEND

ASPHALT PAVEMENT	
	1.5" HMA SURFACE COURSE, MIX D N50 1.5" HMA BINDER COURSE, IL-19 N50 8" AGGREGATE BASE COURSE, CA-6
	SEE PAVEMENT SECTION IN DUPAGE COUNTY DETAIL ON THIS SHEET.
CONCRETE SIDEWALK	
	5" P.C CONCRETE PAVEMENT 4" AGGREGATE BASE COURSE, CA-6.
	8" P.C CONCRETE PAVEMENT 8" AGGREGATE BASE COURSE, CA-6.

CURB LEGEND

	CURB & GUTTER
	DEPRESSED CURB & GUTTER
	BARRIER CURB
	REVERSE PITCH CURB & GUTTER



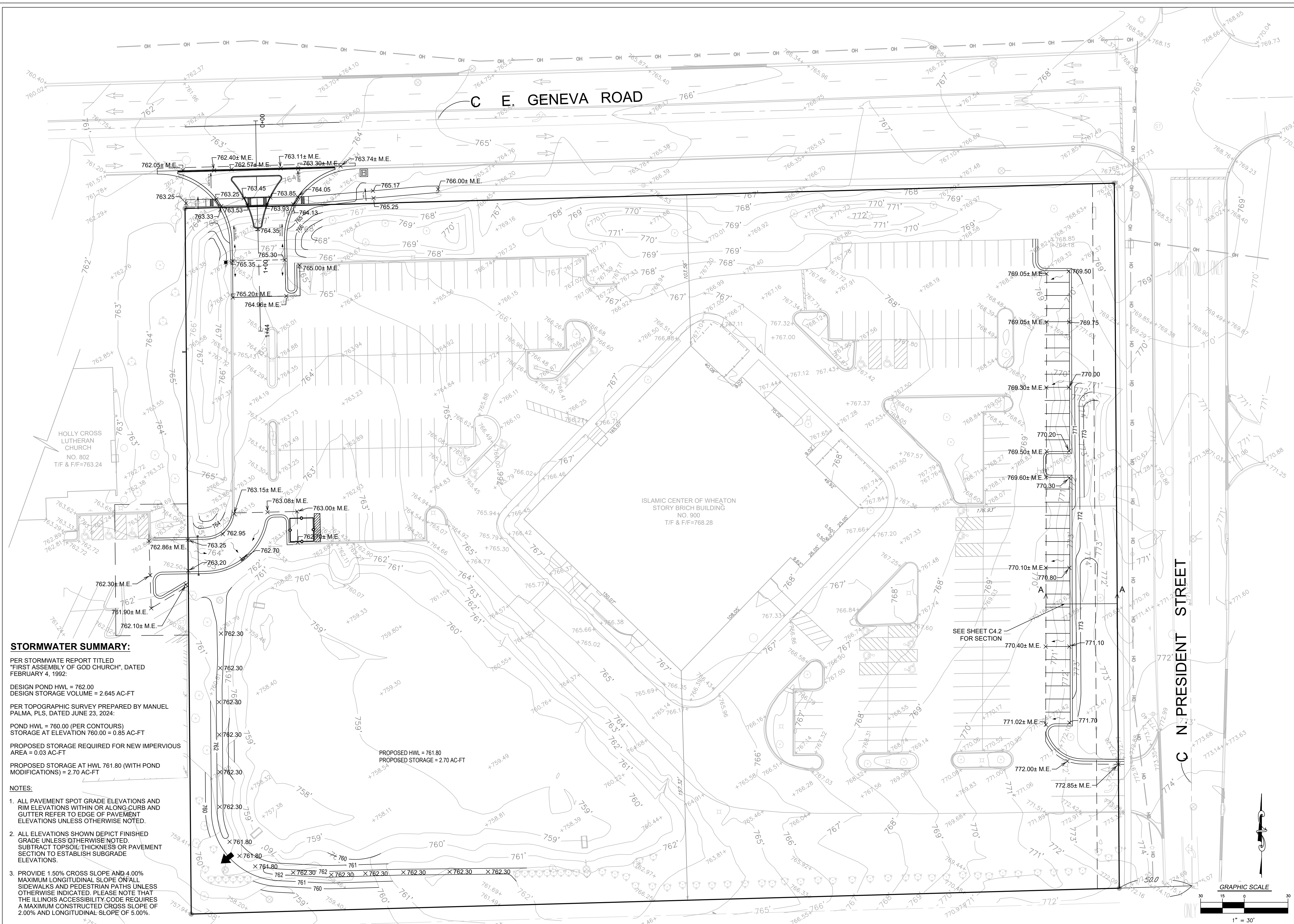
PARKING SUMMARY

EXISTING PARKING	
STANDARD STALLS	= 213
ACCESSIBLE STALLS	= 12
TOTAL PARKING PROVIDED	= 225
PROPOSED PARKING	
STANDARD STALLS	= 228
ACCESSIBLE STALLS	= 12
TOTAL PARKING PROVIDED	= 240
NET NEW PARKING = 15 STALLS	

- NOTES:
- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
 - ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED YELLOW UNLESS OTHERWISE NOTED.
 - ALL CURB AND GUTTER SHALL BE B6.12 UNLESS OTHERWISE NOTED.
 - CONTACT MS. MARYANNE SIOSON, DUPAGE COUNTY'S PROJECT ENGINEER AT (630) 407-6908 (48 HRS. IN ADVANCE) PRIOR TO COMMENCEMENT OF THE RELOCATION OF THE TRAFFIC SIGNAL HANDHOLE
 - AFTER PROJECT'S COMPLETION, THE CONTRACTOR SHALL COMPLETE THE ADA INSPECTION FORMS FOUND ON THE DUPAGE COUNTY DEPARTMENT OF TRANSPORTATION WEBSITE.
 - ALL TRAFFIC SIGNS FACING GENEVA RD. SHALL BE INSTALLED BY DUPAGE COUNTY. ALL TRAFFIC SIGNS FACING THE SITE SHALL BE INSTALLED BY THE GENERAL CONTRACTOR.
 - ALL TRAFFIC SIGNS SHALL BE MOUNTED ON A SQUARE BREAKAWAY POST.
 - ALL TRAFFIC SIGNS SHALL BE INSTALLED AT 7' HIGH MEASURED FROM THE GROUND ELEVATION TO THE BOTTOM OF THE SIGN.

- NOTES:
- Materials for driveway and island:
1. 1/2" HMA Surface Course (Mix D, N70)
2. 2" HMA Base Course (Mix D, N70)
3. 6" Aggregate Subgrade
 - All signs to be installed by others, unless otherwise noted. A sign fee may apply
 - All signs shall be erected on steel breakaway square posts.
 - Island shall be depressed per ADA standards for sidewalk or path if applicable.
 - All dimensions are to edge of pavement.
 - Barrier median shall be constructed with type B6 curb (drainage away from median) or type B6.12 curb & gutter (drainage to median) as is applicable.

LAYOUT AND PAVING PLAN ISLAMIC CENTER OF WHEATON WHEATON ILLINOIS	PROJECT NO.: 240637 PROJECT MANAGER: LC DESIGNED BY: DSBY DRAWN BY: NRS	ORIGINAL ISSUE DATE: 09-04-2024 NO. DATE DESCRIPTION 1 11-1-24 DUPAGE COUNTY DOT REVISIONS 2 1-30-25 DUPAGE COUNTY DOT REVISIONS
	7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com	
	DRAWING NO. C3.0	



STORMWATER SUMMARY:

PER STORMWATER REPORT TITLED "FIRST ASSEMBLY OF GOD CHURCH", DATED FEBRUARY 4, 1992:

DESIGN POND HWL = 762.00
DESIGN STORAGE VOLUME = 2.645 AC-FT

PER TOPOGRAPHIC SURVEY PREPARED BY MANUEL PALMA, PLS, DATED JUNE 23, 2024:

POND HWL = 760.00 (PER CONTOURS)
STORAGE AT ELEVATION 760.00 = 0.85 AC-FT

PROPOSED STORAGE REQUIRED FOR NEW IMPERVIOUS AREA = 0.03 AC-FT

PROPOSED STORAGE AT HWL 761.80 (WITH POND MODIFICATIONS) = 2.70 AC-FT

NOTES:

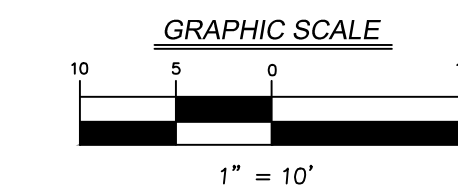
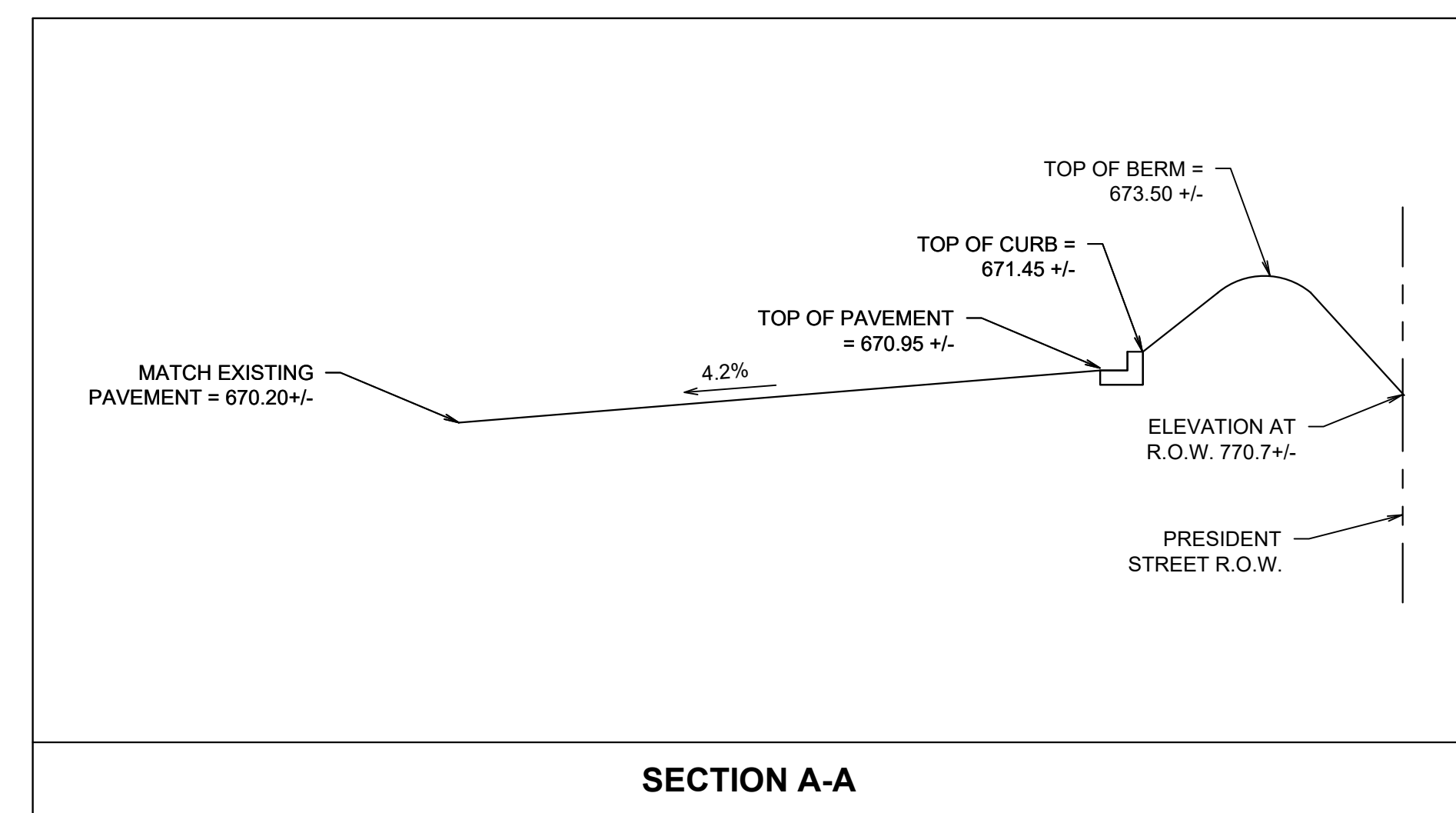
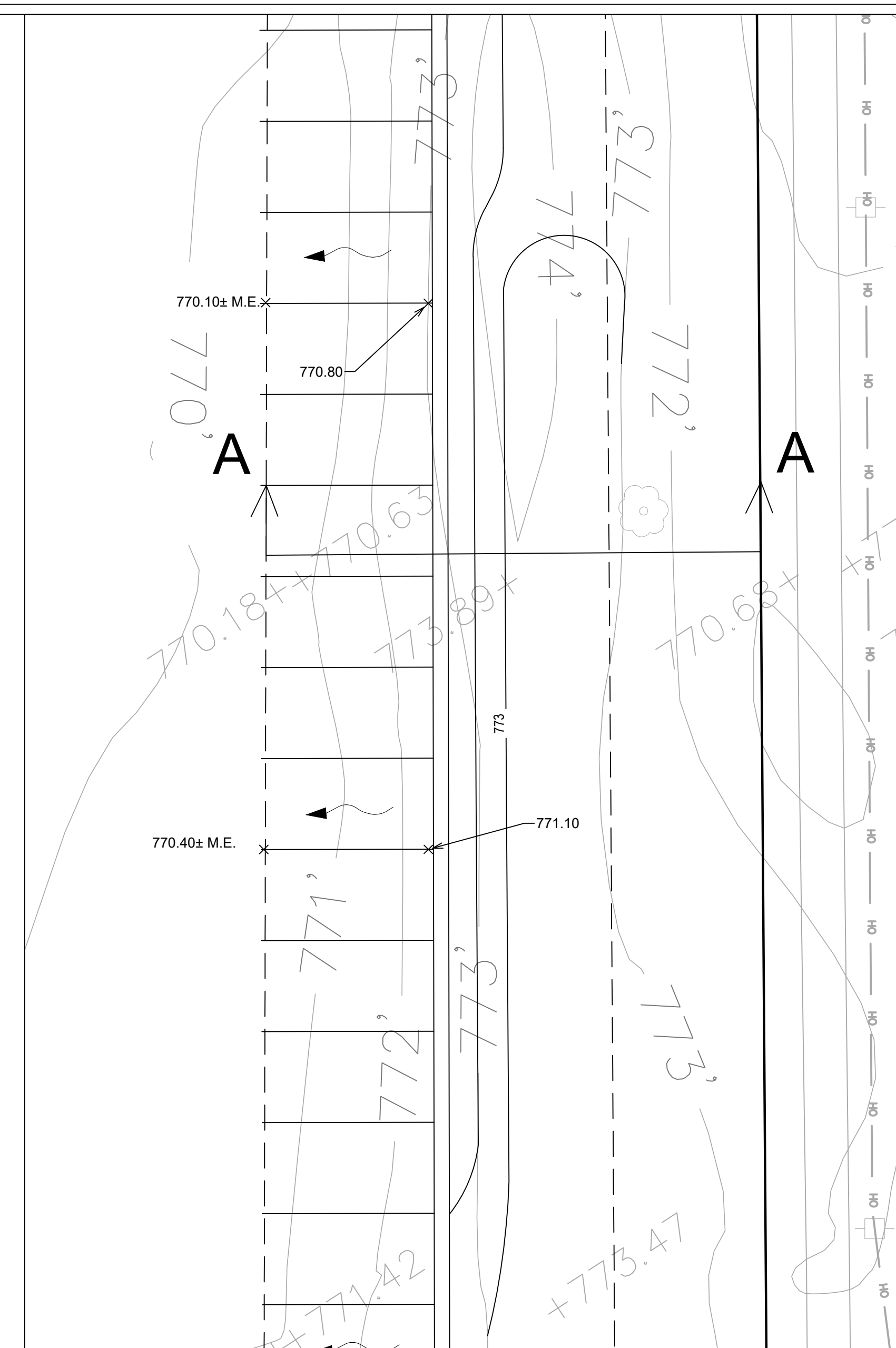
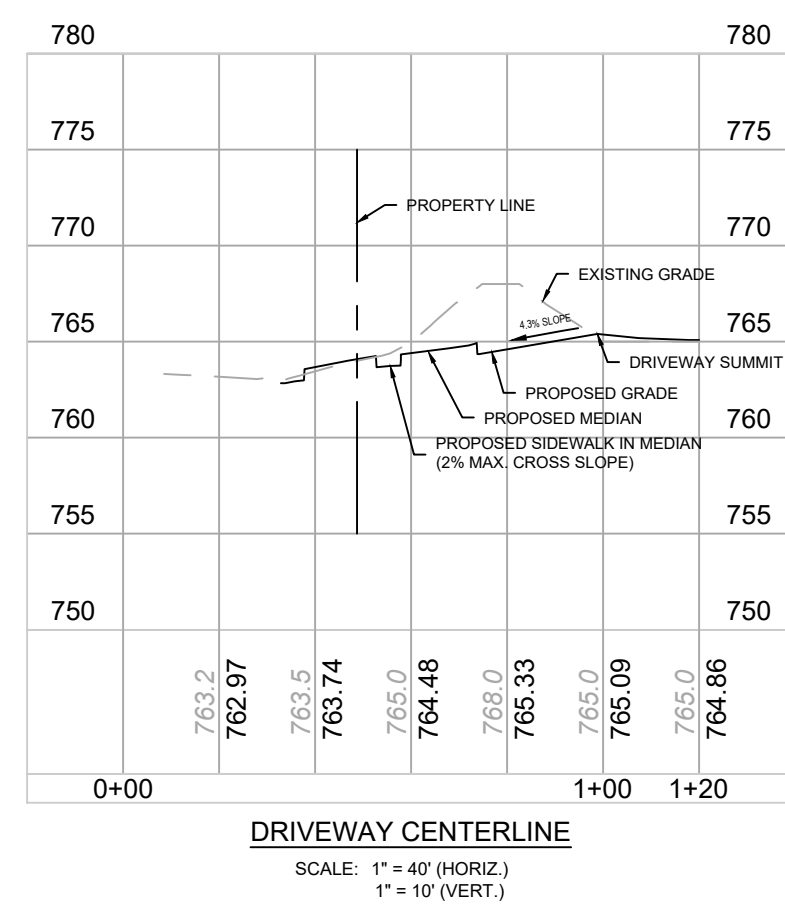
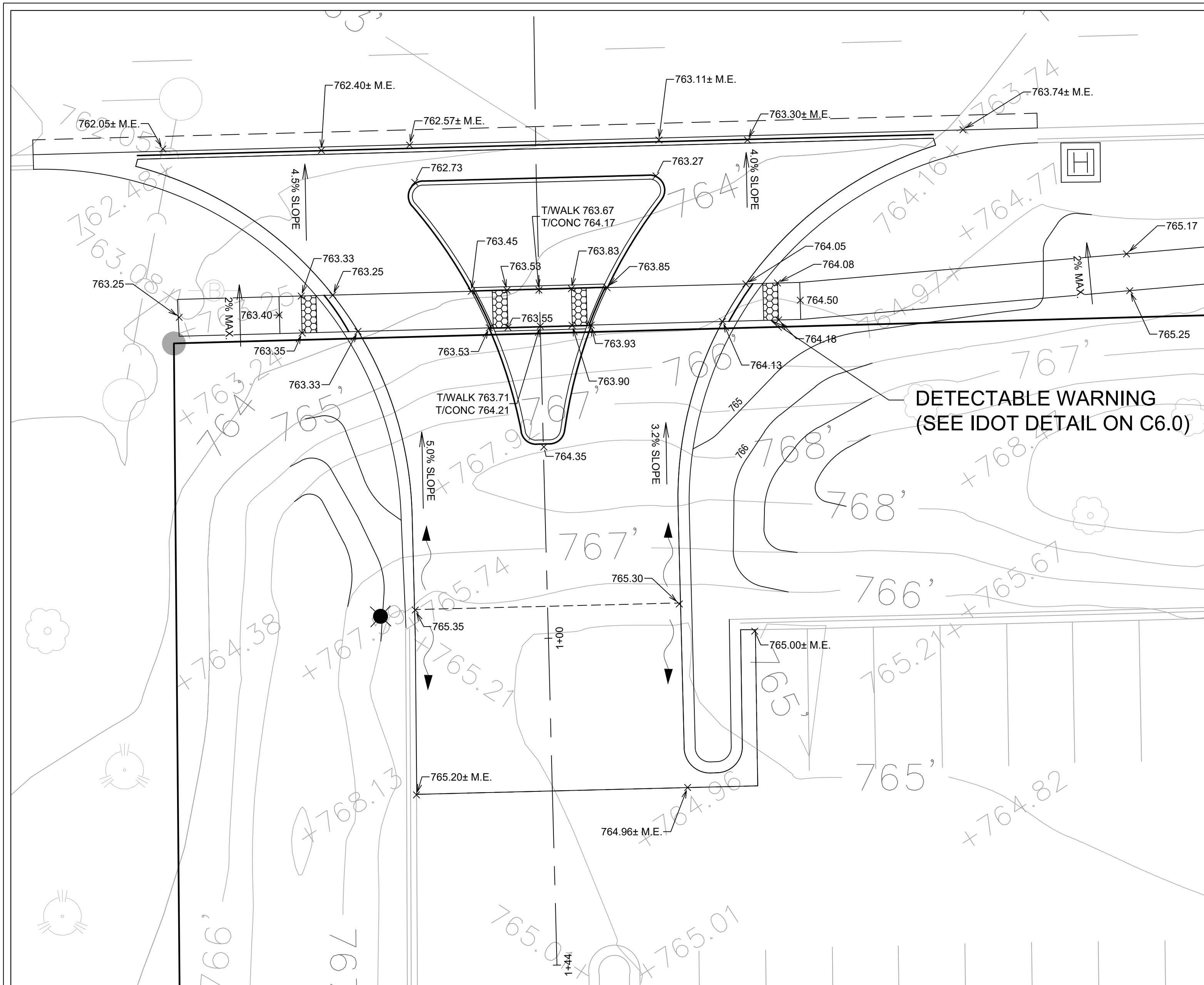
1. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. SUBTRACT TOPSOIL THICKNESS OR PAVEMENT SECTION TO ESTABLISH SUBGRADE ELEVATIONS.
3. PROVIDE 1.50% CROSS SLOPE AND 4.00% MAXIMUM LONGITUDINAL SLOPE ON ALL SIDEWALKS AND PEDESTRIAN PATHS UNLESS OTHERWISE INDICATED. PLEASE NOTE THAT THE ILLINOIS ACCESSIBILITY CODE REQUIRES A MAXIMUM CONSTRUCTED CROSS SLOPE OF 2.00% AND LONGITUDINAL SLOPE OF 5.00%.

REVISIONS		DESCRIPTION
NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS
2	1-30-25	DUPAGE COUNTY DOT REVISIONS

PROJECT NO.:	240637	ORIGINAL ISSUE DATE:	09-04-2024
PROJECT MANAGER:	LC	DESIGNED BY:	DSBY
DRAWN BY:	NRS		

GRADING PLAN		ILLINOIS
ISLAMIC CENTER OF WHEATON		WHEATON
FINAL ENGINEERING		

7325 Janes Avenue Woodridge, IL 60517 630.724.9200 phone www.v3co.com		DRAWING NO.
		C4.0

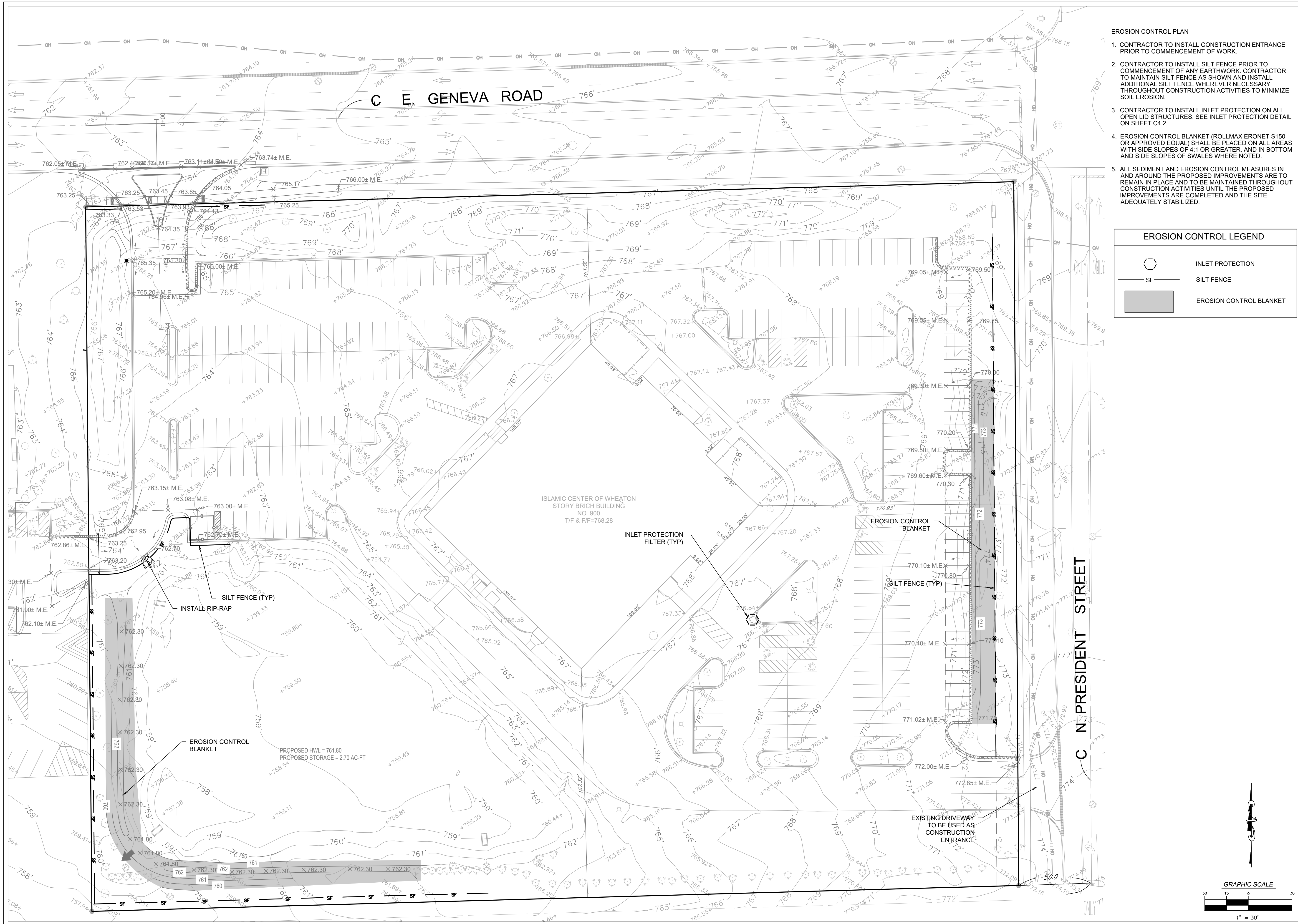


REVISIONS		ORIGINAL ISSUE DATE: 09-04-2024
NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS
2	1-30-25	DUPAGE COUNTY DOT REVISIONS

PROJECT NO.: 240637	PROJECT MANAGER: LC	DESIGNED BY: DSBY	DRAWN BY: NRS
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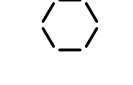
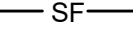

GRADING DETAILS	ILLINOIS
ISLAMIC CENTER OF WHEATON	WHEATON
FINAL ENGINEERING	

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DRAWING NO.	C4.1



- EROSION CONTROL PLAN**
- CONTRACTOR TO INSTALL CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF WORK.
 - CONTRACTOR TO INSTALL SILT FENCE PRIOR TO COMMENCEMENT OF ANY EARTHWORK. CONTRACTOR TO MAINTAIN SILT FENCE AS SHOWN AND INSTALL ADDITIONAL SILT FENCE WHEREVER NECESSARY THROUGHOUT CONSTRUCTION ACTIVITIES TO MINIMIZE SOIL EROSION.
 - CONTRACTOR TO INSTALL INLET PROTECTION ON ALL OPEN LID STRUCTURES. SEE INLET PROTECTION DETAIL ON SHEET C4.2.
 - EROSION CONTROL BLANKET (ROLLMAX ERONET S150 OR APPROVED EQUAL) SHALL BE PLACED ON ALL AREAS WITH SIDE SLOPES OF 4:1 OR GREATER, AND IN BOTTOM AND SIDE SLOPES OF SWALES WHERE NOTED.
 - ALL SEDIMENT AND EROSION CONTROL MEASURES IN AND AROUND THE PROPOSED IMPROVEMENTS ARE TO REMAIN IN PLACE AND TO BE MAINTAINED THROUGHOUT CONSTRUCTION ACTIVITIES UNTIL THE PROPOSED IMPROVEMENTS ARE COMPLETED AND THE SITE ADEQUATELY STABILIZED.

EROSION CONTROL LEGEND

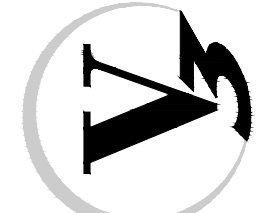
-  INLET PROTECTION
-  SILT FENCE
-  EROSION CONTROL BLANKET

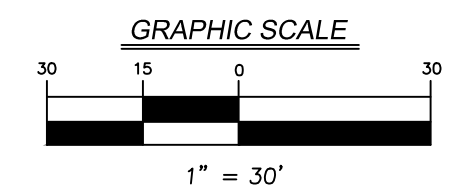
REVISIONS		NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS		
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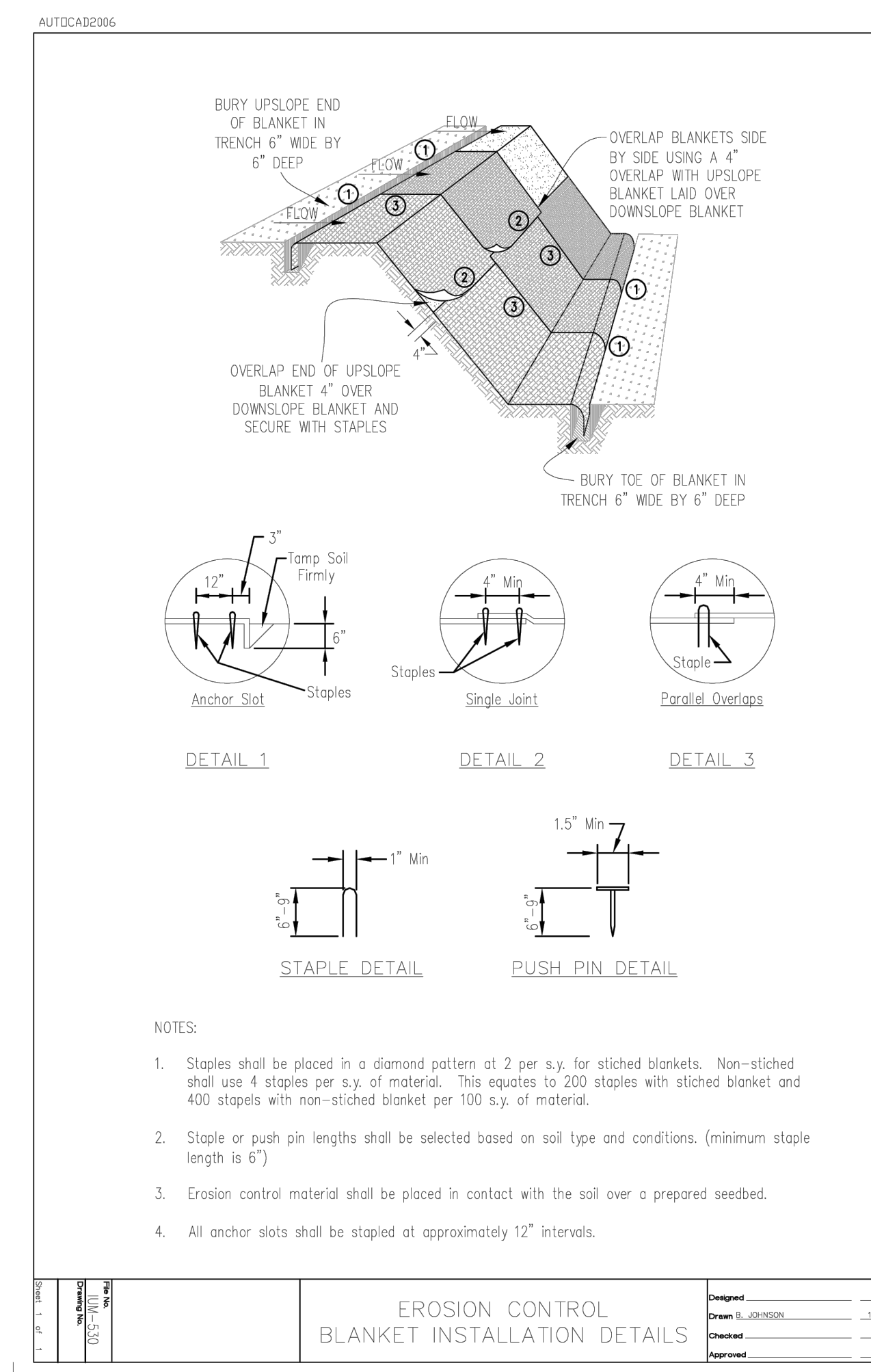
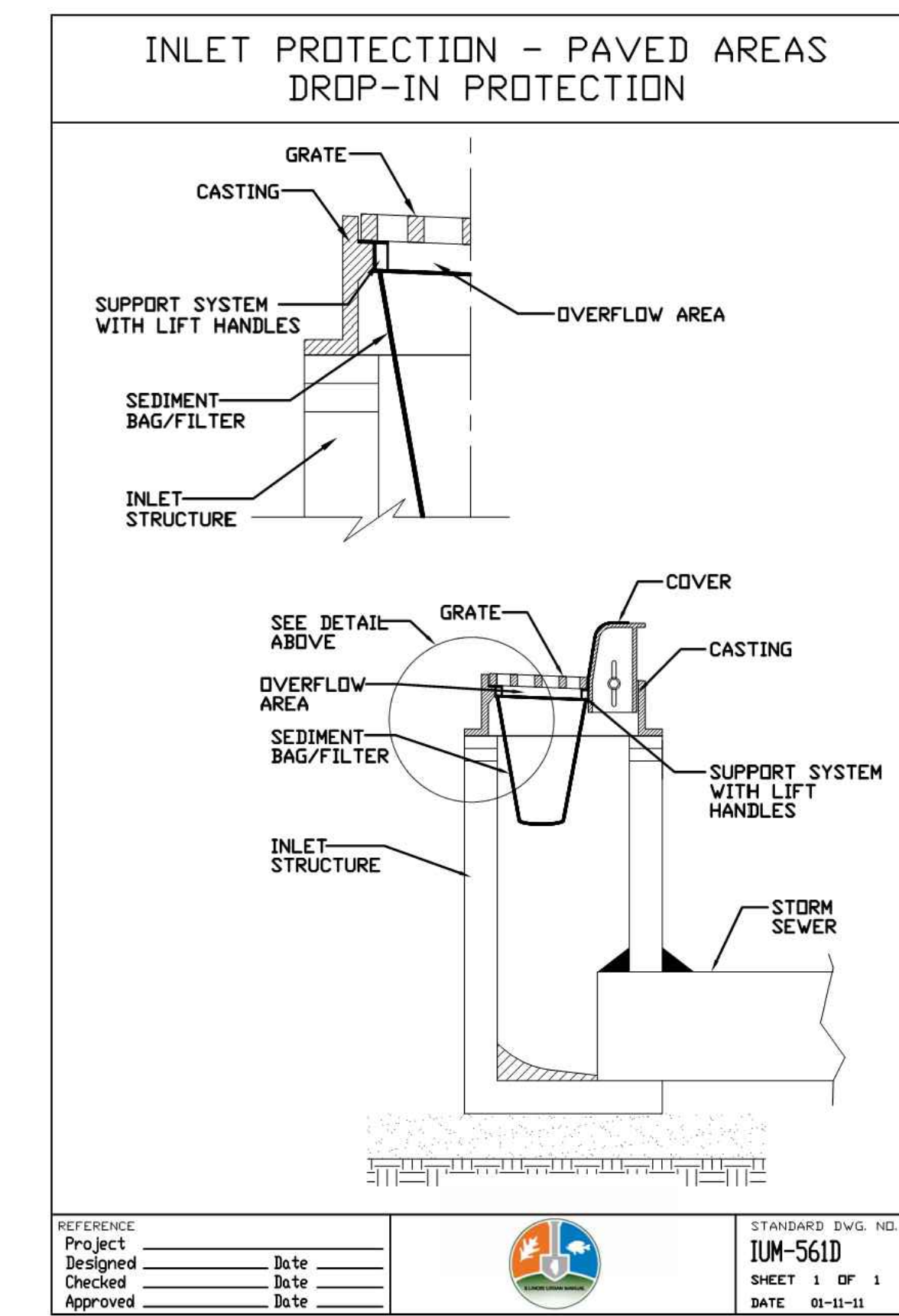
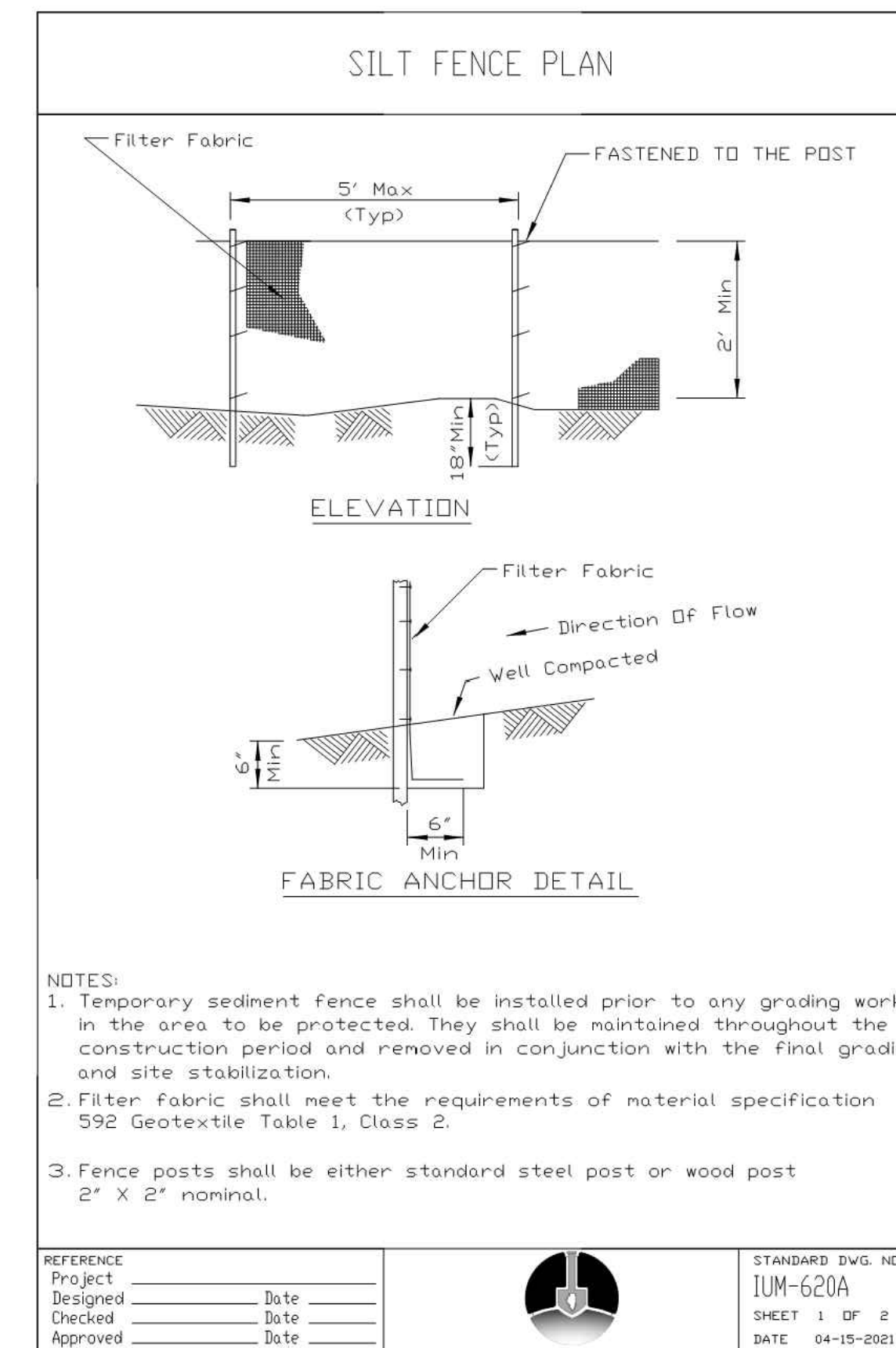
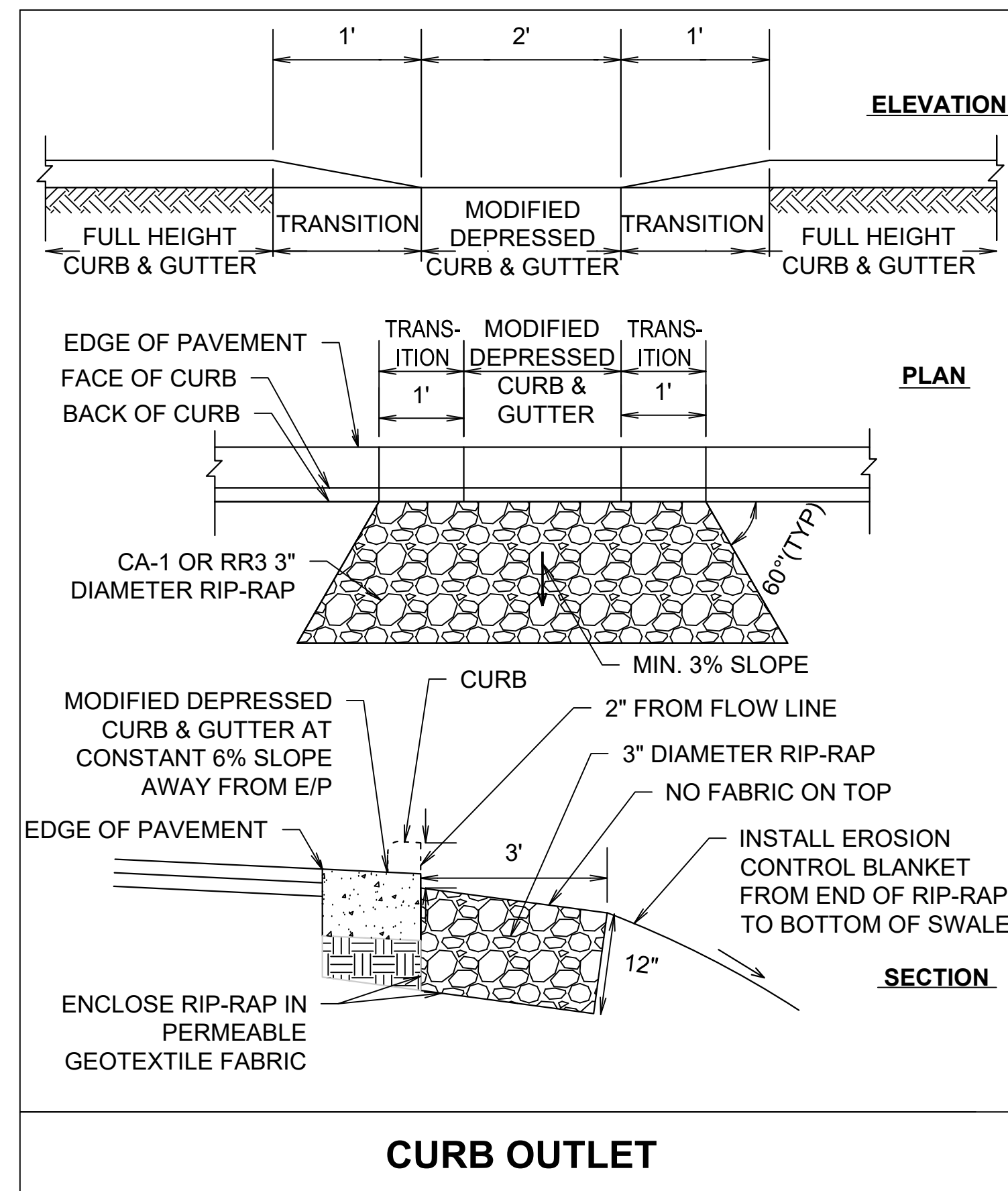
PROJECT NO.:	240637
PROJECT MANAGER:	LC
DESIGNED BY:	DSBY
DRAWN BY:	NRS

ORIGINAL ISSUE DATE:	09-04-2024
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EROSION CONTROL PLAN	ILLINOIS
ISLAMIC CENTER OF WHEATON	FINAL ENGINEERING
WHEATON	

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DRAWING NO.	C4.2





REVISIONS		NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS		
2	1-30-25	DUPAGE COUNTY DOT REVISIONS		

PROJECT NO.:	240637
PROJECT MANAGER:	LC
DESIGNED BY:	DSBY
DRAWN BY:	NRS

EROSION CONTROL DETAILS

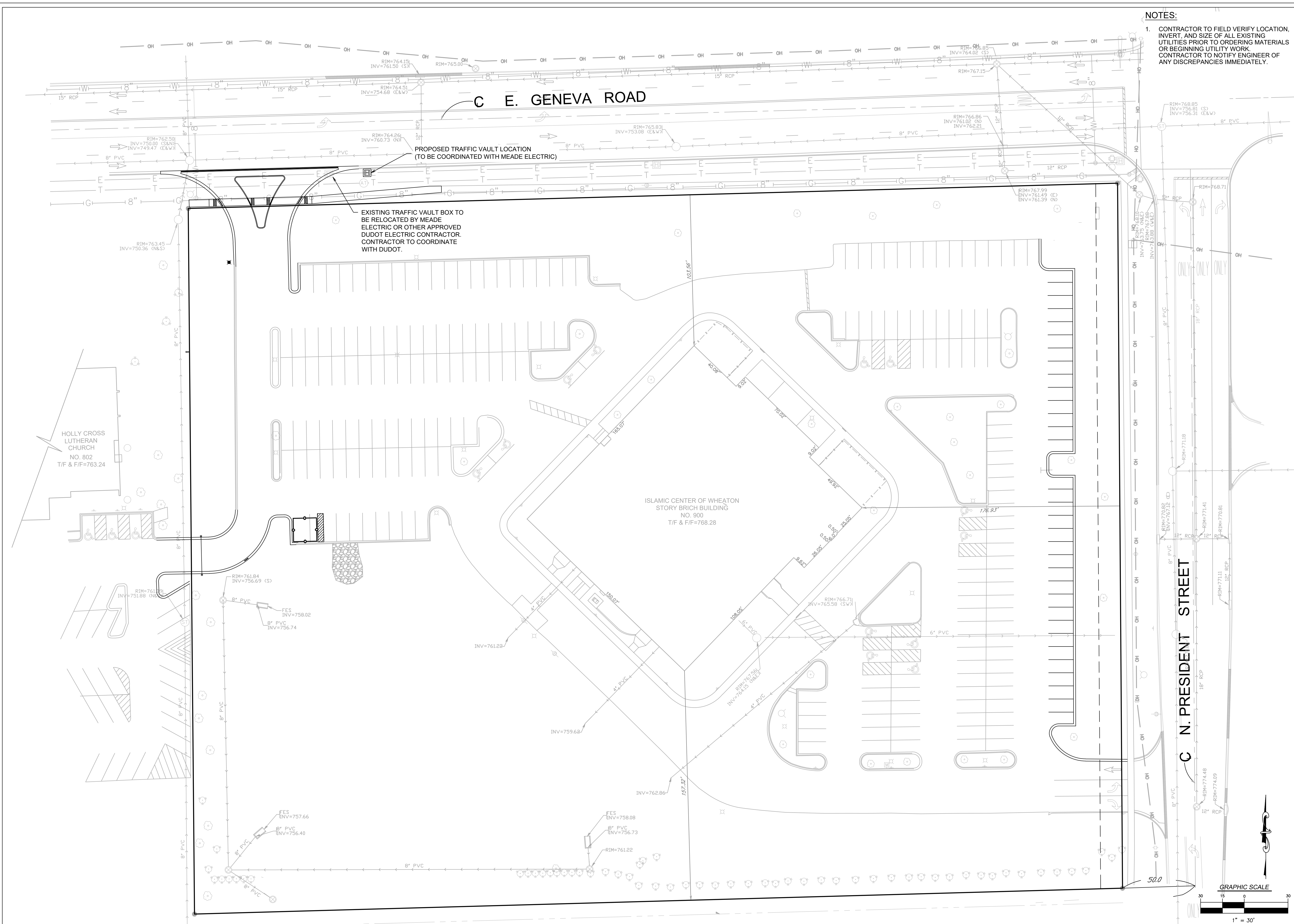
ISLAMIC CENTER OF WHEATON

WHEATON ILLINOIS

FINAL ENGINEERING

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C4.3



NOTES:
 1. CONTRACTOR TO FIELD VERIFY LOCATION, INVERT, AND SIZE OF ALL EXISTING UTILITIES PRIOR TO ORDERING MATERIALS OR BEGINNING UTILITY WORK. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.

HOLLY CROSS LUTHERAN CHURCH
 NO. 802
 T/F & F/F=763.24

ISLAMIC CENTER OF WHEATON
 STORY BRICK BUILDING
 NO. 900
 T/F & F/F=768.28

PROPOSED TRAFFIC VAULT LOCATION
 (TO BE COORDINATED WITH MEADE ELECTRIC)

EXISTING TRAFFIC VAULT BOX TO BE RELOCATED BY MEADE ELECTRIC OR OTHER APPROVED DUDOT ELECTRIC CONTRACTOR. CONTRACTOR TO COORDINATE WITH DUDOT.

REVISIONS		DESCRIPTION
NO.	DATE	DESCRIPTION
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PROJECT MANAGER:	LC	DESIGNED BY:	DSBY
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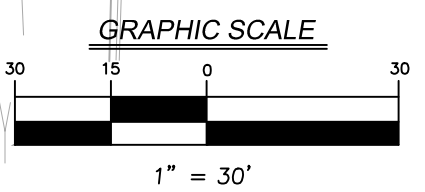
UTILITY PLAN

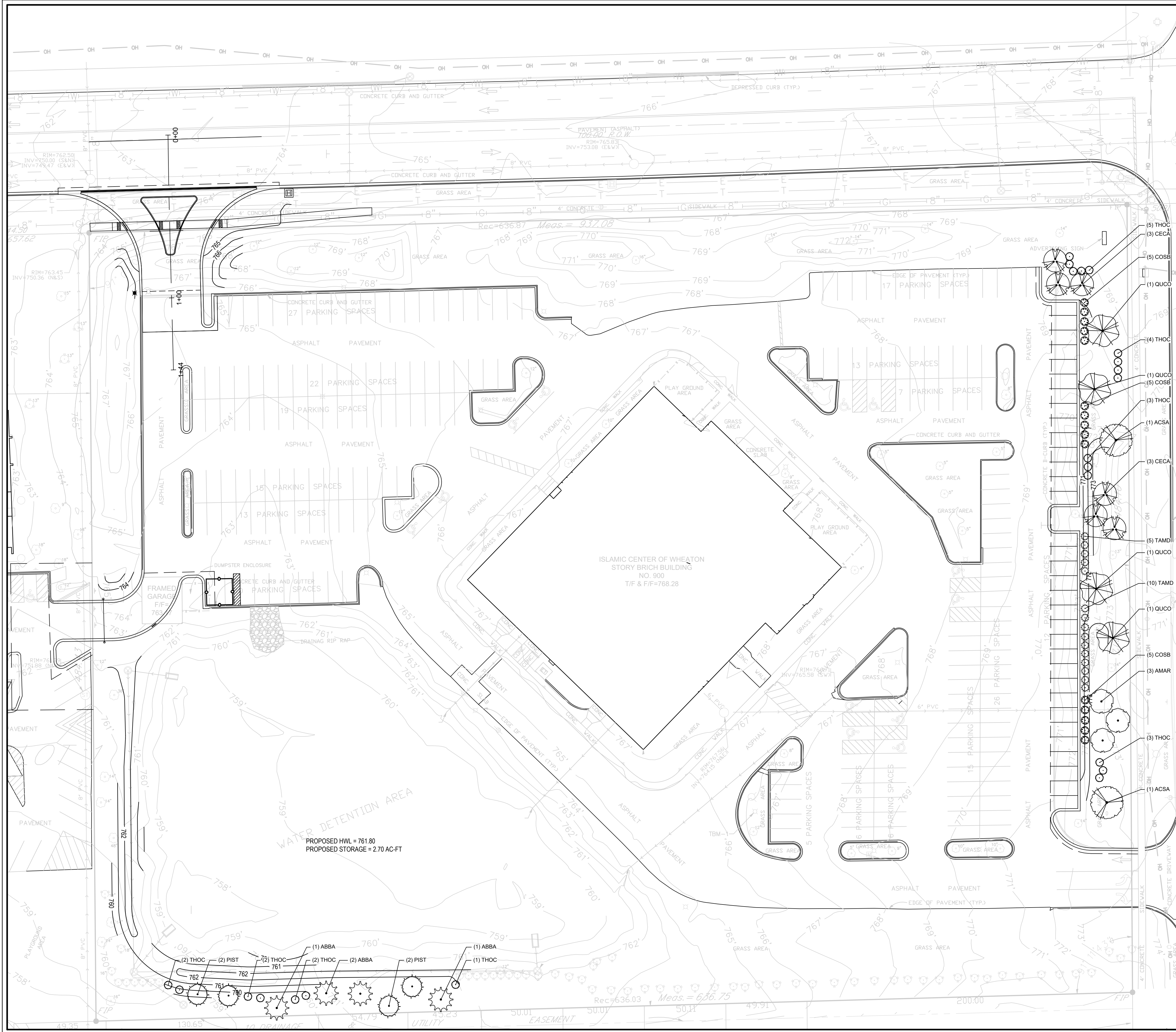
ISLAMIC CENTER OF WHEATON
 WHEATON ILLINOIS

FINAL ENGINEERING

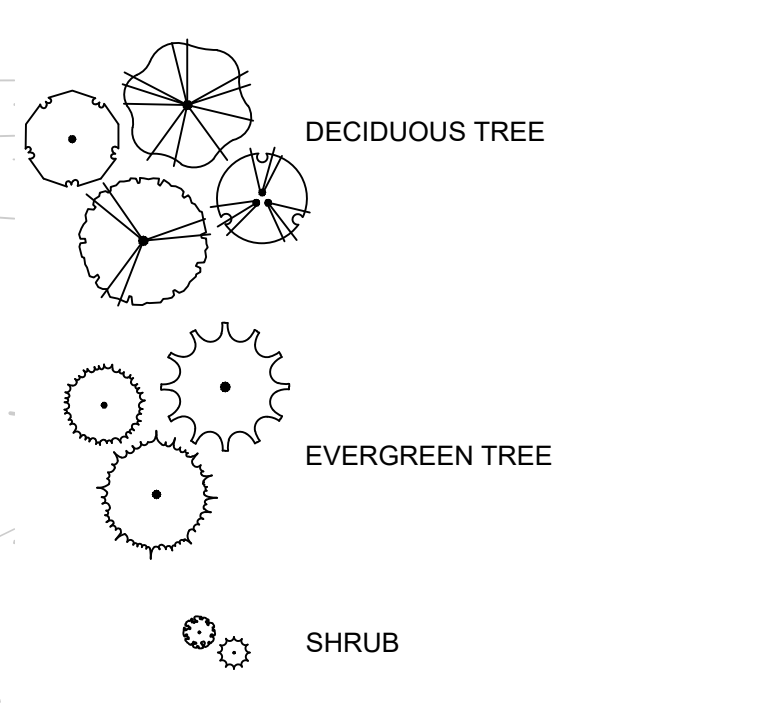
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DRAWING NO.
C5.0





- LEGEND**
- PROPERTY BOUNDARY
 - - - EXISTING MAJOR CONTOUR
 - - - EXISTING MINOR CONTOUR
 - 830 — PROPOSED MAJOR CONTOUR
 - 831 — PROPOSED MINOR CONTOUR
 - ⊠ PROPOSED STORM STRUCTURE
 - ⊙ PLNT PLANTING COUNT AND SPECIES DESCRIPTION
 - ⊙ EXISTING TREE
 - ⊙ DECIDUOUS TREE
 - ⊙ EVERGREEN TREE
 - ⊙ SHRUB



- LANDSCAPE PLAN NOTES**
- SEE SHEET C-20 FOR TREE REMOVAL DESIGNATION.
 - ALL PLANTING BEDS TO BE AMENDED WITH 6" OF COMPOST OVER THE ENTIRE BED.
 - ALL PLANTING BEDS TO HAVE MULCH OVER ENTIRE BED.
 - MULCH TO BE DARK BROWN, FINELY SHREDDED HARDWOOD. INSTALL 3" THICK MINIMUM.
 - ALL PLANTING BEDS TO HAVE SPADED EDGE, 4" IN DEPTH WITH UNIFORM LINES AND CURVES UNLESS OTHERWISE NOTED.
 - ANY AREAS DISTURBED DUE TO CONSTRUCTION WILL BE RE-SEED WITH TURF GRASS UNLESS NOTED OTHERWISE ON THE PLANS.
 - BUILDING FOOTPRINTS BASED ON OWNER PROVIDED INFORMATION. ENGINEER AND LANDSCAPE ARCHITECT ASSUME NO LIABILITY ASSOCIATED WITH CHANGE IN BUILDING FOOTPRINTS. SURVEYOR SHALL CONFIRM WITH OWNER BUILDING FOOTPRINTS PRIOR TO FIELD STAKING.
 - FOR LIST OF PLANT TYPES, SIZES, SPECIFICATIONS, ETC. SEE SHEET L2.0.
 - FOR LIST OF SEED MIXES, SEE SHEET L2.0.

TREE REMOVAL REQUIREMENTS
(CALCULATIONS BASED ON SECTION 6.11 TREE PRESERVATION, ARTICLE VI OF WHEATON, ILLINOIS LANDSCAPE REQUIREMENTS ORDINANCE)

TREE REMOVAL REPLACEMENT TABLE		
Removal DBH (greater than 6")		Replacement Trees at 3" caliper (min.)
10		7
7		14
14		13
13		
Total Caliper Replacement Value (inches)	44	15

PARKING LOT LANDSCAPE REQUIREMENTS
(BASED ON SECTION 6.6 PARKING LOT LANDSCAPING, ARTICLE VI OF WHEATON, ILLINOIS LANDSCAPE REQUIREMENTS ORDINANCE)

PERIMETER LANDSCAPING
25% EVERGREEN TREES = **PROVIDED**
25% SHADE AND ORNAMENTAL TREES = **PROVIDED**
50% EVERGREEN AND DECIDUOUS SHRUB SCREENING = **PROVIDED**

INTERIOR LANDSCAPING
ONE (1) SHADE TREE PER TWENTY (20) PARKING SPACES = **PROVIDED**

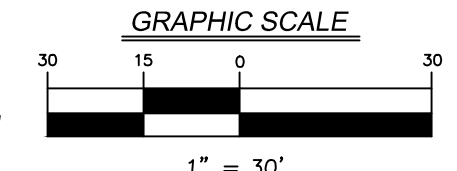
REVISIONS

NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS
2	1-30-25	DUPAGE COUNTY DOT REVISIONS

LANDSCAPE PLAN
ISLAMIC CENTER OF WHEATON
FINAL ENGINEERING
WHEATON ILLINOIS

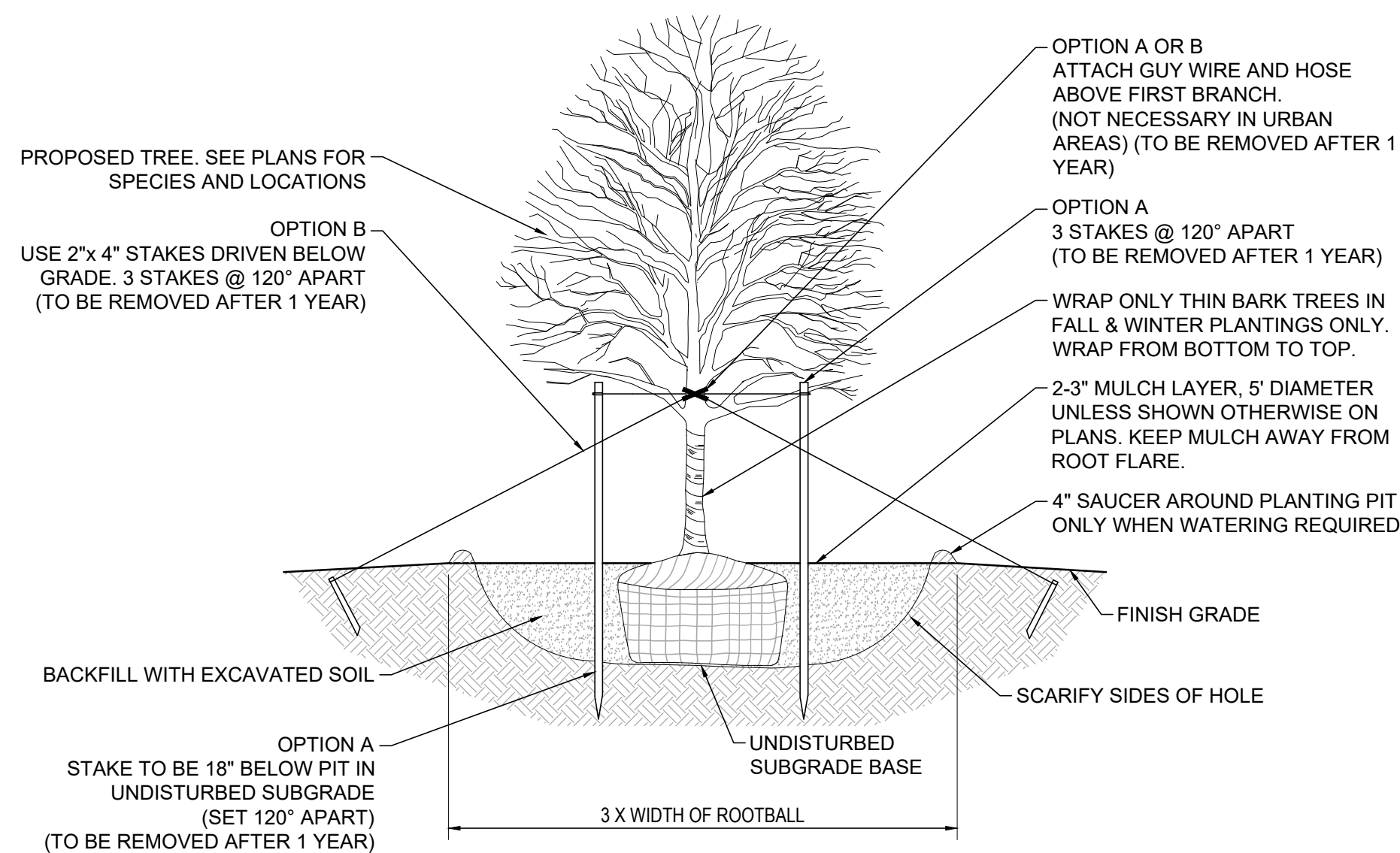


Joint Utility Locating Information for Excavators

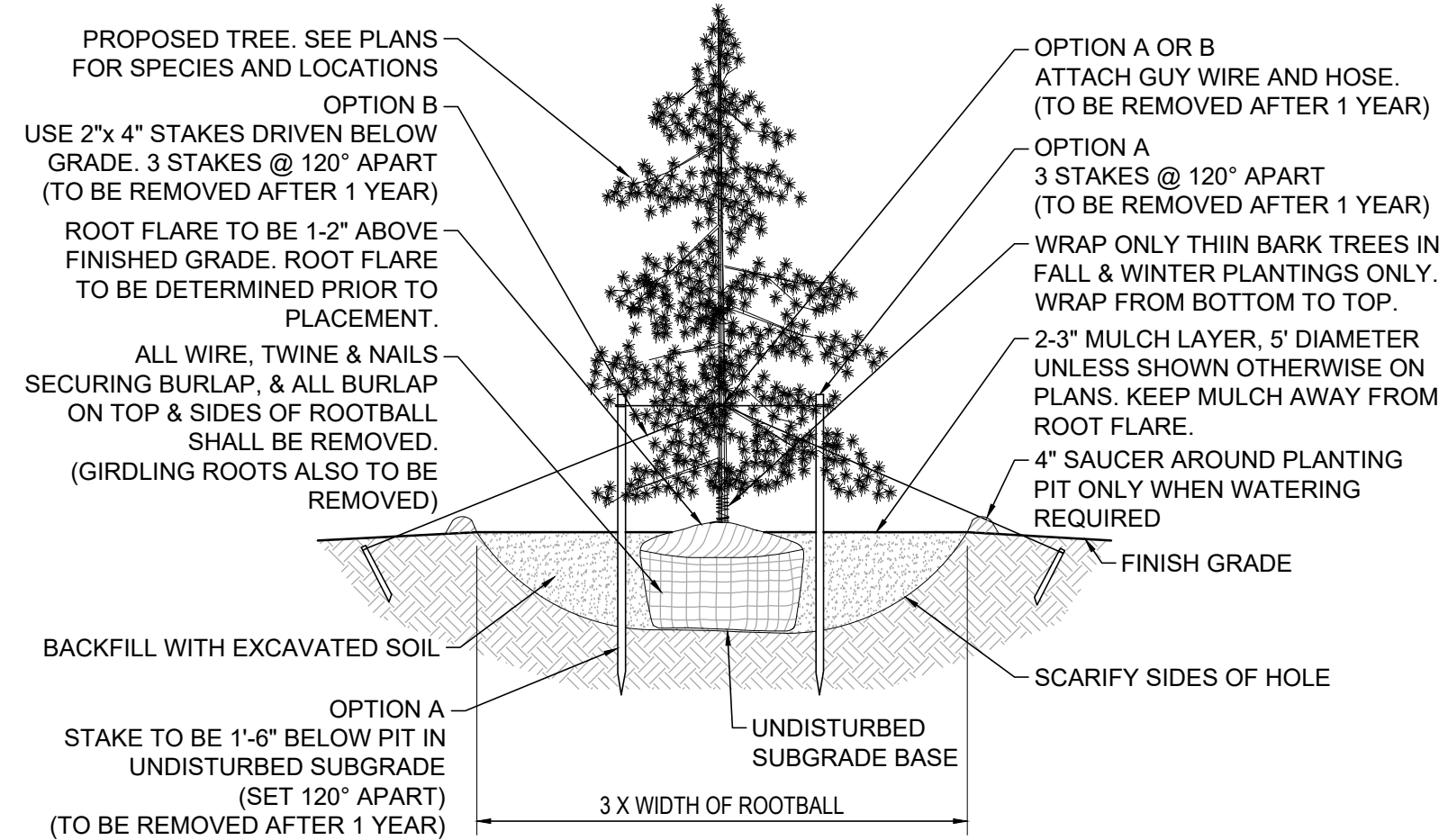


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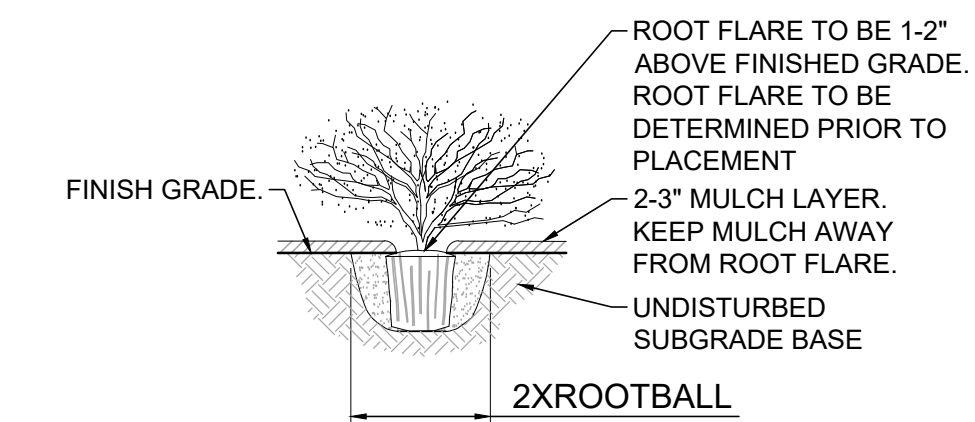
DRAWING NO.
L1.0



01 DECIDUOUS TREE PLANTING DETAIL
SCALE: 1/4" = 1'-0"



02 EVERGREEN TREE PLANTING DETAIL
SCALE: 1/4" = 1'-0"



03 SHRUB PLANTING DETAIL
SCALE: 1/2" = 1'-0"

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CAL	HEIGHT	CANOPY
TREES							
	ABBA	4	Abies balsamea Balsam Fir	B & B		8' MIN.	15'
	ACSA	2	Acer saccharum Sugar Maple	B & B	3" MIN.		20'
	AMAR	3	Amelanchier arborea Common Serviceberry Multi-stem	B & B		8' MIN.	15'
	CECA	6	Cercis canadensis Eastern Redbud Multi-stem	B & B		8' MIN.	15'
	PIST	4	Pinus strobus Eastern White Pine	B & B		8' MIN.	15'
	QUCO	4	Quercus coccinea Scarlet Oak	B & B	3" MIN.		20'
	THOC	22	Thuja occidentalis American Arborvitae	B & B		8' MIN.	5'
SHRUBS							
	COSB	15	Cornus sericea 'Bailey' Bayley's Red Twig Dogwood	Cont.		48" MIN.	60" o.c.
	TAMD	15	Taxus x media 'Dark Green' Dark Green Anglo-Japanese Yew	Cont.		48" MIN.	60" o.c.

04 PLANT SCHEDULE
SCALE: NTS

PERMANENT TURF GRASS SEED MIX			
TYPE OF SEED - GRASSES			LARGER
80% Turf-Type Tall Fescue (<i>Festuca arundinacea</i>) - Choose 3 of the following varieties			New Establishment
Bravo 2	Kingdom	Named Tall Fescue	6-8 lbs./1,000 SF
Padre/2	Restore		
Stetson II	Tango		
			Renovation
20% Turf-Type Perennial Ryegrass (<i>Lolium perenne</i>) - Choose 1 of the following varieties			20-50% Existing Cover: 5-7 lbs./1,000 SF
Align/2	ProLine	Prosport 4	50-75% Existing Cover: 4-6 lbs./1,000 SF
COVER CROP TURF GRASS SEED MIX			
TYPE OF SEED - COVER CROP		SEEDING RATES	
Seed Oats (<i>Avena sativa</i>)		32 lbs./ACRE	
Annual Rye (<i>Lolium multiflorum</i>)		6 lbs./ACRE	

- NOTES:**
- ANY AREAS DISTURBED DUE TO CONSTRUCTION WILL BE RE-SEEDING WITH TURF GRASS UNLESS NOTED OTHERWISE ON THE PLANS.
 - PROPER SEED BED PREPARATION IS NECESSARY TO ESTABLISH TURF GRASS. SEE LANDSCAPE SPECIFICATIONS FOR ADDITIONAL DETAILS.
 - IRRIGATION AND/OR STARTER MULCH IS RECOMMENDED FOR MAXIMUM SEED GERMINATION.

05 GRASS SEED MIXES & RATES
SCALE: NTS

- IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.
- NO SUBSTITUTIONS OF PLANT MATERIALS WILL BE ALLOWED. IF PLANTS ARE NOT AVAILABLE, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO BID IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT I.D. AT NURSERY OR CONTRACTORS OPERATIONS PRIOR TO MOVING TO JOB SITE. PLANTS MAY BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE BY THE LANDSCAPE ARCHITECT.
- ALL PLANTS SHALL MEET OR EXCEED THE LATEST EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK, AS SET FORTH BY AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
- PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- ALL LANDSCAPE PLANTINGS SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE ARCHITECT. AT THE END OF THIS PERIOD, PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY THE LANDSCAPE ARCHITECT SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR THEIR PORTION OF WORK.
- LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO BID DATE OF ANY PLANTS THEY FEEL MAY NOT SURVIVE IN LOCATIONS NOTED ON PLANS.
- BACKFILL FOR TREE PLANTING SHALL BE NATIVE SOIL FROM TREE PIT AND INCORPORATE A 5-10-5 ANALYSIS SLOW-RELEASE FERTILIZER AT APPROVED RATES.
- AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING BEDS AT A RATE SPECIFIED BY MANUFACTURER FOR EACH PLANT VARIETY.
- TREE STAKING IS NOT REQUIRED AS PART OF INITIAL PLANTING. HOWEVER, STAKING WILL BE REQUIRED TO MAINTAIN ANY TREES WHICH BECOME OUT OF PLUMB.
- LANDSCAPE CONTRACTOR IS TO COORDINATE ALL WORK WITH OTHER TRADES TO MINIMIZE RISK OF DAMAGE TO SITE UTILITIES.
- PRIOR TO THE INSTALLATION OF LANDSCAPING, LANDSCAPE CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CONSTRUCTION MANAGER, AND ANY OTHER AFFECTED PARTY TO DISCUSS PROPER SEPARATIONS FROM UTILITIES.
- A MINIMUM OF TEN (10) FOOT HORIZONTAL DISTANCE FROM LATERALS OR ANY OTHER SANITARY OR STORM SEWER FACILITIES (AS MEASURED FROM THE DRIP LINE OF THE MATURE TREE TO THE CENTER OF SEWER FACILITIES) MUST BE MAINTAINED. ANY TREES OR LANDSCAPING PLACED WITHIN EASEMENTS OR RIGHTS-OF-WAY ARE AT RISK OF BEING DAMAGED OR REMOVED WITHOUT THE OBLIGATION OF REPLACEMENT.

LANDSCAPE CONSTRUCTION NOTES

REVISIONS

NO.	DATE	DESCRIPTION
1	11-1-24	DUPAGE COUNTY DOT REVISIONS
2	1-30-25	DUPAGE COUNTY DOT REVISIONS

PROJECT NO.: 240637

PROJECT MANAGER: LC

DESIGNED BY: DSBY

DRAWN BY: NRS

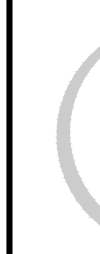
LANDSCAPE DETAILS

ISLAMIC CENTER OF WHEATON

FINAL ENGINEERING

ILLINOIS

7325 Janes Avenue
Woodridge, IL 60517
630.724.9200 phone
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DRAWING NO.

L2.0

STORMWATER MANAGEMENT AREAS & LANDSCAPE SPECIFICATIONS

1.1 SITE PREPARATION

When feasible, prior to mass earthwork operations, stake the limits of the proposed stormwater management areas & landscape planting areas and do not allow heavy equipment to run over the soil in these locations. Soil compaction is very critical in the functioning of stormwater management areas.

Do not clear vegetation until necessary to help minimize site erosion.

Place tree protection barriers around the drip line of all trees that are to remain. There shall be no storage of materials, heavy equipment or vehicles within the drip line of trees.

1.2 MATERIALS

1.2.1 SUBMITTAL REQUIREMENTS

Contractors shall submit to engineer/landscape architect for review and approval all proposed materials to be used within the stormwater management areas and landscape areas prior to purchase. Submittals include but are not limited to:

- Planting soil composition
- Compost/Mulch
- River Cobble
- Turf Grass Sod and Seed
- Plant lists (Woody and herbaceous materials)
- Herbicides and Pre-Emergent Herbicides

1.2.2 PLANTING SOIL

The soil shall be a uniform, well blended mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the bio-retention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The soil mix shall be free of Bermuda grass, Quack grass, Johnson grass, or other noxious weeds. The planting soil for bio-retention facilities shall consist of a mixture of sand or crushed glass cullet of equivalent grade, topsoil, and compost components, to obtain an engineered soil mix meeting the following specifications:

USDA Texture class: sandy loam or loamy sand. Mineral fraction consists of no less than 40% well-graded sand or glass cullet and no greater than 10% clay (dry weight basis)
 Organic content: 20% (dry weight basis)
 pH: 5.5 - 7.0
 Soluble Salts (Salinity): less than 500 mg/kg (500ppm)
 Phosphorous: soil p-index should be between 15 and 40
 Permeability: Minimum 0.50 inches/hour

Volumetric proportions of the components making up the bio-retention soil mix shall be as follows:

- Sand: 50% by volume
- Compost: 20% by volume
- Topsoil: 30% by volume

Compost shall be finished (aged), and composted material shall be of plant origin. Compost shall have a C:N ratio ≤ 25:1.

If the planting soil does not meet the above characteristics, then it shall either be adjusted to meet the criteria or removed and replaced with an acceptable planting soil. See 1.3 Testing Requirements.

Existing topsoil on site may be amended to meet the specifications of the planting soil mix. The existing topsoil shall be tested for organic content, grain size analysis and permeability to identify necessary amendments.

Planting soil shall not be incorporated into the Work until it is approved by the engineer/landscape architect.

1.2.3 MULCH MATERIAL

A mulch layer shall be provided on top of the planting areas, to the depth OF 2-3 inches. The material shall consist of finished (aged) leaf compost mulch, and shall be well mixed and homogenous, uniform in color and free of foreign material and viable plant seeds. The mulch material shall have no visible free water and produce no dust when handled. It shall meet the following criteria:
 90% of material passing 1/2" screen
 Organic content: 35- 65% (dry weight basis)
 pH: 6.0 - 8.0

1.2.4 TURF GRASS SOD AND SEED

1.2.4.1 TURF GRASS SOD

See plans for locations. Turf grass sod shall be a mixture within the following ranges:
 Kentucky Bluegrass: 50-100%
 Fine Fescue: 0-30%
 Turf Type or Rhizomatous Tall Fescue: 50-100%
 Turf grass sod shall be of good quality, free of weeds, disease and insects and of good color and density. Turf grass sod shall be machine-cut at a minimum uniform soil thickness and grown in central Indiana.

1.2.4.2 TURF GRASS SEED / COVER CROP

See plans for seed mixture(s) and rate(s). No substitutions shall be allowed without approval from the ecological consultant.

Seed shall be clean, delivered in original unopened packages, and bearing an analysis of the contents. Guaranteed 98 percent pure and to have a minimum germination rate of 90 percent, within 1 year of test.

Temporary cover shall be Seed Oats (Avena sativa) and annual rye grass (Lolium multiflorum). Under no circumstances shall the site be stabilized with winter rye, grain rye, or winter wheat. These plants produce toxins that inhibit prairie seed germination.

1.2.5 LIVE PLANT MATERIAL

1.2.5.1 TREES & SHRUBS

General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant Schedule or Plant Legend shown on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.

No bare root material shall be used unless specified on the plans.

Containerized Plant Material: Provide healthy, disease-free plants of species and variety shown or listed, with well-established root systems reaching to sides of the container to maintain a firm ball, but not with excessive root growth encircling the container. Provide only plants that are acclimated to outdoor conditions before delivery.

Plant material and quantities for stormwater management areas and landscape areas shall be taken from the plans. Any plant material substitutions shall require approval from the engineer/landscape architect.

1.2.5.2 LIVE PLANTS

See plans for approved herbaceous plant lists. All native plants must be of wild ecotype. No hybrids, cultivars or substitution may be included without approval from the engineer/landscape architect. Local genotypes are adapted to local soil and climate conditions and shall be used whenever possible.

1.2.6 HERBICIDES AND PRE-EMERGENTS

Herbicide to be used in stormwater management areas consist of glyphosate herbicides approved for use around water, such as Rodeo.

1.3 TESTING REQUIREMENTS

1.3.1 PLANTING SOIL TESTING

Soil tests shall be performed for every 500 cubic yards of planting soil, with the exception of pH and organic content tests, which are required only once per stormwater management BMP.

The planting soil shall be tested and shall meet the following criteria:

- pH range: 5.5 - 7.0
- organic matter: 5 - 10% (dry weight basis)
- magnesium: minimum 35 lbs/acre
- phosphorus (phosphate - P2O5, Bray I): shall not exceed 75 lbs./acre
- potassium (potash - K2O): minimum 85 lbs/acre
- soluble salts not to exceed 500 ppm

All stormwater management areas shall have a minimum of one test per bioretention basin and a minimum of one soil test per 500 cubic yards. Each test shall consist of both the standard soil test for pH, phosphorus, and potassium and additional tests of organic matter, and soluble salts. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the top soil was excavated. Should the pH fall out of the acceptable range by no greater than 0.2, it may be modified (higher) with lime or (lower) with iron sulfate plus sulfur.

1.4 INSTALLATION

1.4.1 PLANTING SOIL

Installation of soils must be completed in a manner that will ensure preservation of the infiltrative capacity of the underlying soils. The moisture content of the soil shall be low enough to prevent clumping and compaction during placement.

To prevent compaction within the limits of the basins, only hand laborers, small excavation hoes with wide tracks, light equipment with turf tires, marsh equipment or wide-track loaders may be used. No heavy equipment shall be used within the perimeter of the stormwater management BMP facility before, during, or after the placement of the planting soil.

It is very important to minimize compaction of both the base (in-situ soil) of the stormwater management areas and the required backfill. Re-fracture subgrade soils that have been compacted or smeared by raking, diskling or tilling to a minimum depth of 12 inches. Soil surfaces shall be scarified by manually raking to aerate and reduce soil compaction. Soil shall be placed in 6 inch loose depth lifts. Lifts are surfaced in order to reduce the possibility of excessive settlement. Soil shall be lightly hand-tamped or compacted with a water-filled landscape roller, to reduce potential for excessive settling. No other mechanical equipment shall be used to compact the planting soil or underlying soils. Lifts may also be watered to encourage natural compaction. Overfill to allow for natural settlement.

Uniformly grade planting soil to achieve a smooth surface, free of irregular surface changes. Do not over-work or excessively compact planting soil. Grade to cross sections, thickness and elevations indicated on plans. Settling of soil by walking on surface and working with hand equipment is acceptable.

1.4.2 TURF GRASS

1.4.2.1 SEQUENCING AND SCHEDULING

Turf grass shall be installed following final grading activities and all other planting installations.

1.4.2.2 SITE PREPARATION

Verify the depth and quality of the topsoil and that the topsoil has been placed according to specifications or exists as a current site condition.

Restore areas if eroded or otherwise disturbed after finish grading and before installation. Proceed with installation only after unsatisfactory conditions have been corrected.

All weeds and grasses shall be dug out by the roots and disposed of off-site.

Rake so all areas drain and are of uniform slope.

Remove all trash and stones exceeding 1/2" in diameter from area to a depth of 2" prior to preparation and installation of sod. Removal of stones and debris shall be done at the time of installation. Repair topsoil disturbed by removal of stones and debris.

1.4.2.3 PLANTING

Turf grass shall be placed on prepared soil that has been watered and is still moist. Turf grass sod shall be laid with tight joints, rolled, and thoroughly watered. River water, where available and allowed by federal, state and local authorities, is suitable for irrigation.

When installation occurs on a sloping surface where erosion may be a problem, turf grass sod shall be laid with staggered joints and secured by pegging.

1.4.3 PERMANENT TURF GRASS SEED

1.4.3.1 SEQUENCING AND SCHEDULING

Perform the seeding work and at such times that the seeding will not be damaged by freezing temperatures, rain, or high winds.
 Optimum Seeding Dates:
 • Northern Indiana/Illinois: August 15 through September 15
 • Southern Indiana/Illinois: September 1 through September 30
 Dormant seeding can be done from Thanksgiving through March, when no snow is present, but before the ground has thawed.
 Spring seeding is often difficult but is acceptable from April through June if site conditions and construction schedules warrant the need for spring seeding.
 Summer seeding should be avoided when possible.
 Permanent seeding done between May and August may require irrigation.

1.4.3.2 SITE PREPARATION

Verify the depth and quality of the topsoil and that the topsoil has been placed according to specifications or exists as a current site condition. Restore areas if eroded or otherwise disturbed after finish grading and before installation. Proceed with installation only after unsatisfactory conditions have been corrected.

All weeds and grasses shall be dug out by the roots and disposed of off-site.
 Rake topsoil thoroughly by running in two directions at right angles over the entire surface to be planted. Rake so all areas drain and are of uniform slope.

Remove all trash and stones exceeding 1/2" in diameter from area to a depth of 2" prior to preparation and installation of sod. Removal of stones and debris shall be done at the time of installation. Repair topsoil disturbed by removal of stones and debris.

1.4.3.3 PLANTING

Sow grassed areas evenly with a mechanical spreader at the minimum rate as specified on the plans, roll to cover seed and water with fine spray. Wet soil at a rate of approximately 120 gallons per 1,000 square feet. River water, where available and allowed by federal, state and local authorities, is suitable for irrigation.
 Method of seeding may be varied at discretion of Contractor on his own responsibility to establish a smooth, uniformly grassed area.

1.4.4 TREES, SHRUBS AND VINES

1.4.4.1 SEQUENCING AND SCHEDULING

Planting Time: Proceed with, and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.

Planting seasons shall be as follows:

Deciduous Trees: Primary Planting Time March 15th to June 30th, and Secondary Planting Time September 1st to December 1st, unless noted otherwise on drawings.

Shrubs: Primary Planting Time March 15th to June 30th, and Secondary Planting Time September 1st to November 1st, unless noted otherwise on drawings.

If weather conditions within these seasons are not favorable to plant health and establishment at the time of planting (e.g. drought), planting shall be delayed until favorable conditions resume or further actions shall be taken to ensure healthy establishment (e.g. irrigation). It is the responsibility of the contractor to ensure survivability during the warranty period.

1.4.4.2 SITE PREPARATION

Planting Pits and Trenches: Excavate circular planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are not acceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
 Excavate approximately two times as wide as ball diameter for shrubs and three times as wide for trees.
 Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.

1.4.4.3 PLANTING

Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1.
 Remove stem girdling, broken or kinked roots. Remove injured roots by cutting cleanly; do not break.
 Set stock plumb and in center of planting pit or trench with root flare 1-2 inches above adjacent finish grades. To prevent settling of the root ball, root ball should be placed on undisturbed soil only.
 Use planting soil as specified in 1.4.2 for backfill.
 Balled and Burlapped: After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides. Where practical remove burlap, rope and wire baskets from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 Container-Grown: Carefully remove root ball from container without damaging root ball or plant.
 Fabric Bag-Grown Stock: Carefully remove root ball from fabric bag without damaging root ball or plant. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 Loosen pot-bound roots and remove or cut any circling and girdling roots.
 Do not place root ball directly on any underdrain structures. If root ball is larger than soil depth, adjust root ball such that it is adjacent to but not resting on any underdrain structures.
 Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 Continue backfilling process. Water again after placing and tamping final layer of soil.
 2-3 inches of mulch material (per 1.2.3) to be placed uniformly on top of soil after plant material is installed.

See details on plans for plant installation.

When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.
 Water all trees and shrubs deeply and thoroughly upon installation and as described in section 1.7.3 to maintain health during the first year of establishment.
 Stake tree in southwesterly direction. Ties should be loose fitting and allow for natural sway. Remove after one year.
 Minimize pruning to dead or broken branches.

Place 4" perforated corrugated plastic pipe (CPP) around tree for protection from deer. Cut length to height of tree from root flare to first branch and slice lengthwise. (Not necessary in urban areas) Contractor shall be responsible for replacement of any plant material damaged by wildlife if protective CPP is not installed.

1.4.5 LIVE NATIVE HERBACEOUS PLANTS

1.4.5.1 SEQUENCING AND SCHEDULING

Installation of plugs shall be performed between April 15 and August 15 and thereafter at Contractor's discretion based upon current weather patterns. Contractor shall be responsible to replace any plugs that do not survive as a result of winter heating.

If native seed is installed with the plugs and has not germinated within the plug planting area, no pre-emergent herbicides shall be applied during the six (6) months prior to installation and for at least one (1) year following installation.

If native seed is NOT installed and will not be installed within the plug planting area, pre-emergent herbicides shall be applied immediately following the plug installation and as needed to control seasonal weeds for at least one (1) year following installation.

1.4.5.2 SITE PREPARATION

Verify that the surrounding uplands have been stabilized.

Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus one (1) inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future.

Restore areas if eroded or otherwise disturbed after finish grading and before planting. Verify that the site is clean and free of debris. Proceed with installation only after unsatisfactory conditions have been corrected.

Two weeks (14 days) prior to installation, apply a glyphosate herbicide approved for use around water (Rodeo) to kill existing or remaining lawn grasses and other non-favorable vegetation.

Verify the depth and quality of the topsoil and that the topsoil has been placed according to specifications or exists as a current site condition.

Do not apply any fertilizer.

1.4.5.3 PLANTING

Use an auger or other appropriate tool to excavate planting holes in a staggered pattern per the planting plan. Refer to landscape drawings for specific spacing requirements.

Plant plugs level with final soil grade. Be certain that soil is placed around the roots and firmed into place. Under no circumstances is soil to be mounded up to cover roots that are not planted at the appropriate depth.

1.5 QUALITY OF WORKMANSHIP

1.5.1 PERMANENT TURF GRASS SOD/SEED

All workmanship and finishes shall be first class in all respects, and in accordance with the best practice. The drawings and specifications describe the scope of work but do not show or describe all work or material that may be required for full performance and completion of the contract documents. On the basis of the scope shown herein, Contractor shall furnish and install all parts required for the proper execution and completion of the work. Any item included will require the Contractor to furnish and install all parts needed for a complete installation.

1.5.2 TREES & SHRUBS

All workmanship and finishes shall be first class in all respects, and in accordance with the best practice. The drawings and specifications describe the scope of work but do not show or describe all work or material that may be required for full performance and completion of the contract documents. On the basis of the scope shown herein, Contractor shall furnish and install all parts required for the proper execution and completion of the work. Any item included will require the Contractor to furnish and install all parts needed for a complete installation.

1.5.3 LIVE NATIVE HERBACEOUS PLANTS

All workmanship and finishes shall be first class in all respects, and in accordance with the best practice. The drawings and specifications describe the scope of work but do not show or describe all work or material that may be required for full performance and completion of the contract documents. On the basis of the scope shown herein, Contractor shall furnish and install all parts required for the proper execution and completion of the work. Any item included will require the Contractor to furnish and install all parts needed for a complete installation.

Installer Qualifications: The submitting bidders shall be, and have been, actively and directly engaged in plug installation for a period of two (2) or more years. Provide proof of five (5) or more successful plug installations.

Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on project site when planting is in progress.

Qualified bidders shall possess specialized equipment for working in and around water, including but not limited to a small boat, hip waders, or flotation life preservers to be worn while working in water.

Certification of Plugs: Require vendor to provide certification of each species and state both botanical and common name.

1.6 GUARANTEE AND WARRANTY

1.6.1 PERMANENT TURF GRASS SOD

All work in this Section shall be guaranteed against any and all defects in workmanship and materials appearing within a period of one (1) year after final completion of all site work and acceptance of the work by the Owner. Contractor shall replace, without additional expense to the Owner, any materials and workmanship that show defects within said period, with finished and new materials.

Evaluate establishment of permanent turf grass sod for percent survivability thirty days prior to the end of the first complete growing season and prior to the release of any maintenance or guarantee obligations.
 Success Criteria: Survivability must be 95% or greater. Dead material in excess of 5% of all sodded areas shall be replaced by the Contractor prior to the end of the warranty period without additional expense to the Owner.

1.6.2 PERMANENT TURF GRASS SEED

All work in this Section shall be guaranteed against any and all defects in workmanship and materials appearing within a period of one (1) year after final completion of all site work and acceptance of the work by the Owner. Contractor shall replace, without additional expense to the Owner, any materials and workmanship that show defects within said period, with finished and new materials.

Evaluate establishment of permanent turf grass seed for percent survivability thirty days prior to the end of the first complete growing season and prior to the release of any maintenance or guarantee obligations.
 Success Criteria: 75% of seeded area shall be covered with vegetation. 25% of the vegetation shall be permanent matrix, and less than 5% invasive species. 50% of the species within the permanent matrix shall be present.

1.6.3 TREES & SHRUBS

All work in this Section shall be guaranteed against any and all defects in workmanship and materials appearing within a period of one (1) year after final completion of all installation work and acceptance of the work by the Owner. Contractor shall replace, without additional expense to the Owner, any materials and workmanship that show defects within said period, with finished and new materials.

1.6.4 NATIVE HERBACEOUS PLUGS

All work in this Section shall be guaranteed against any and all defects in workmanship and materials appearing within a period of one (1) year after final completion of all installation work and acceptance of the work by the Owner. Contractor shall replace, without additional expense to the Owner, any materials and workmanship that show defects within said period, with finished and new materials.

All plugs shall exhibit vigorous growth and be thoroughly rooted by the end of first complete growing season and prior to the release of any maintenance or guarantee obligations. For installations occurring prior to June 1 the end of the first complete growing season would be in October (or at the first hard freeze) of the installation year. For installations occurring on and after June 1 the end of the first complete growing season would be in October (or at the first hard freeze) of the following year.

Success Criteria: Survivability must be 95% or greater. Dead plant material in excess of 5% of all plugged material shall be replaced by the Contractor prior to the end of the warranty period without additional expense to the Owner.

1.7 MAINTENANCE REQUIREMENTS

1.7.1 PERMANENT TURF GRASS SOD

Initial Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Maintain as required in below.

Begin maintenance of lawns immediately after sod is installed in each area and continue until acceptable lawn is established, but not less than 60 days after date of Substantial Completion.
 If full maintenance period has not elapsed before the end of planting season, or if lawn is not fully established, continue maintenance during the next planting season.

Maintenance includes watering, fertilizing, weeding, mowing, trimming, replanting, and other operations to provide a uniform, weed free, smooth lawn.

Watering: Week 1: In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of at least four (4) inches.
 Week 2 and beyond: Water turf grass sod as required to maintain adequate moisture in the upper four (4) inches of soil. Avoid application of too much water - turf grass sod should not be continually saturated.

Mowing: Turf grass sod height shall be maintained between two (2) and six (6) inches or as specified by the Owner. Not more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings.

1.7.2 PERMANENT TURF GRASS SEED

Initial Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Maintain as required in below.

Begin maintenance of lawns immediately after each area is planted and continue until acceptable lawn is established, but not less than 60 days after date of Substantial Completion.
 If full maintenance period has not elapsed before the end of planting season, or if lawn is not fully established, continue maintenance during the next planting season.

Maintenance includes watering, fertilizing, weeding, mowing, trimming, replanting, and other operations to provide a uniform, weed free, smooth lawn. Ensure cover crop seed germinates within two (2) weeks of planting. If dormant seeding, ensure cover crop germinates at the start of the growing season.

Watering: Thoroughly water all permanently seeded areas after the seed has germinated for a period of one (1) month.
 Apply a total rate of 120 gallons per 1000 square feet (12.2 m3/1000 m2) in at least two (2) applications spread over seven (7) days. Apply the water under pressure with a nozzle that produces a spray that will not dislodge the seed, seedlings, or mulch material. If 1/2 inch (13 mm) or greater of rainfall has occurred within the first seven (7) day period, the Installer may delay or omit the secondary application, depending on weather conditions.

Mowing: Once established, turf grass height shall be maintained between two (2) and six (6) inches or as specified by the Owner. Not more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings.

Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use practices to minimize the use of pesticides and reduce hazards.

Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

After the first growing season, evaluate the health and structure of the plant and provide structural pruning only as necessary.

1.7.3 TREES & SHRUBS

Initial Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Maintain as required in below. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.

Maintenance Period for Trees and Shrubs: one year

Maintain plantings by pruning, watering, weeding, mulching, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease.

Prune trees, shrubs, and vines according to standard professional horticultural and arboricultural practices. Do not cut tree leaders; remove only injured, dying, or dead branches from trees and shrubs; and prune to retain natural character.

Irrigate the plants as necessary to maintain rootball moisture throughout the first growing season. Surrounding soil moisture is not a suitable substitute for rootball moisture evaluation. Use of river water, where available and allowed by federal, state and local authorities, is acceptable for irrigation purposes.

Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence or where moved by stormwater flows from large rainfall events.

Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use practices to minimize the use of pesticides and reduce hazards.