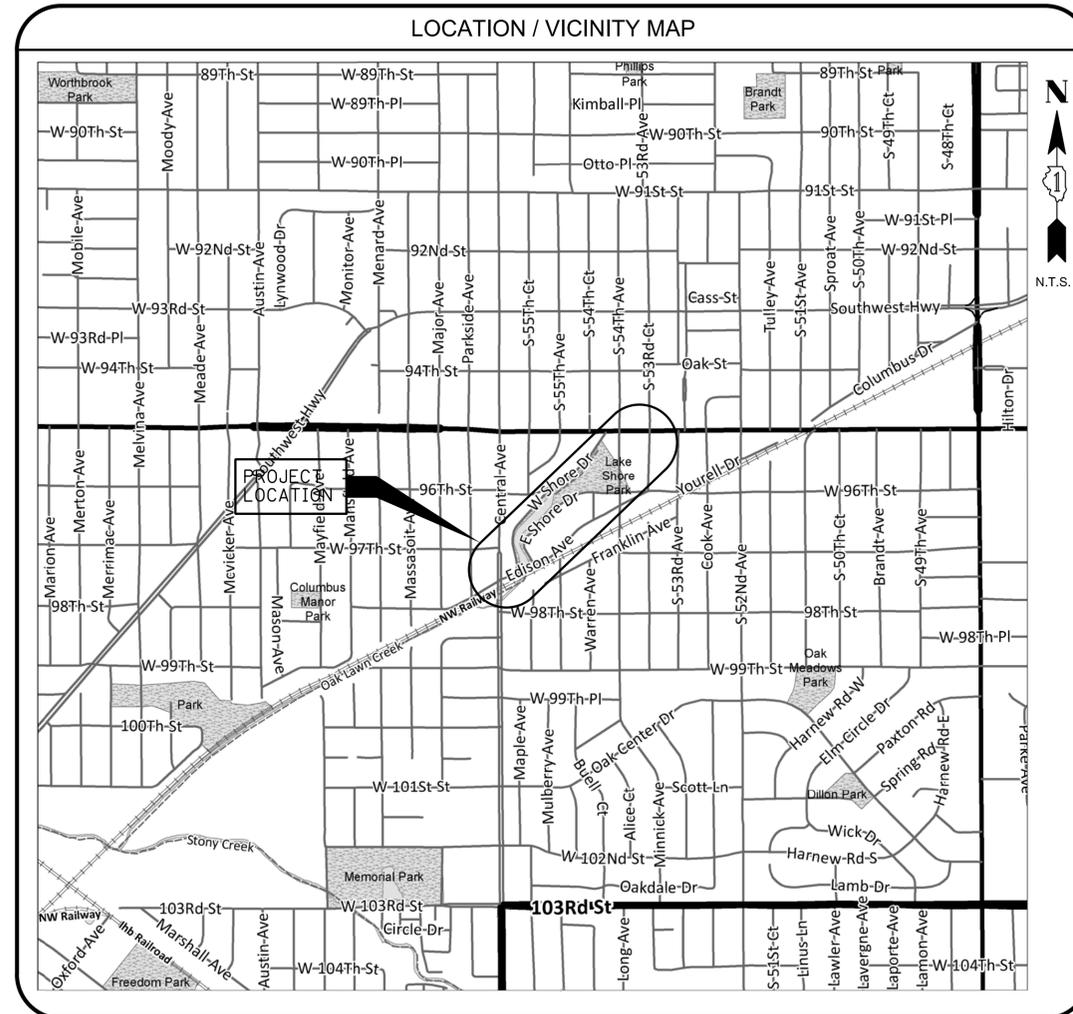


VILLAGE OF OAK LAWN

OAK LAWN LAKE IMPROVEMENTS

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IDOT STANDARDS

STD. 000001-07	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
STD. 280001-07	TEMPORARY EROSION CONTROL SYSTEMS
STD. 606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
STD. 701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
STD. 701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
STD. 701501-06	URBAN LANE CLOSURE 2L, 2W UNDIVIDED
STD. 701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
STD. 701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
STD. 701901-08	TRAFFIC CONTROL DEVICES
BLR 17-4	TRAFFIC CONTROL DEVICES - DAY LABOR CONSTRUCTION
BLR 18-6	TRAFFIC CONTROL DEVICES - DAY LABOR MAINTENANCE

Village President:
DR. SANDRA BURY

Trustees:
TIM DESMOND
ALEX OLEJNICZAK
PAUL MALLO
THOMAS PHELAN
WILLIAM STALKER
TERRY VORDERER

Village Manager:
LARRY DEETJEN

Village Engineer:
JACK GALLAGHER

Village Public Works Director:
STEVE BARRETT

Village Clerk:
JANE M. QUINLAN

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE STORMWATER AND DRAINAGE OF SURFACE WATERS MEET THE MINIMUM CRITERIA FOR STORMWATER MANAGEMENT IN ACCORDANCE WITH LOCAL AND COUNTY STANDARDS.

BENCHMARK

SEE ALIGNMENT, TIES, AND BENCHMARKS - SHEET 7

SITE BENCHMARKS:

OSBM 1: MOST SOUTHWEST CORNER OF NORTHWEST HEADWALL OF SOUTH HEADWALL OF BOX CULVERT UNDER EDISON AVENUE: ELEV. 604.56

OSBM 2: BASE OF LIGHT POLE AT NORTHWEST CORNER OF W. SHORE DRIVE AND 96th STREET: ELEV. 604.26

LOCATION

THE PROJECT IS LOCATED AT OAK LAWN LAKE BETWEEN W SHORE DRIVE AND E SHORE DRIVE IN THE VILLAGE OF OAK LAWN, IL

CALL JULIE 811 WITH THE FOLLOWING:
COUNTY COOK
CITY-TOWNSHIP OAK LAWN

48 HOURS BEFORE YOU DIG, EXCLUDING SAT., SUN., & HOLIDAYS

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION



LEE M. FELL _____ DATE _____
ENGINEER

ILLINOIS REGISTRATION No. 062-053708
EXPIRATION DATE: 11/30/2019

LEE M. FELL, PE

THE FOLLOWING FLOOD PROTECTION AREAS ARE LOCATED WITHIN 100 FEET OF THE DEVELOPMENT: FLOODPLAIN, WETLANDS, AND RIPARIAN ENVIRONMENT.

LEE M. FELL, PE

CLIENT :  **VILLAGE OF OAK LAWN**
9446 SOUTH RAYMOND AVENUE
OAK LAWN, ILLINOIS 60453

 **CHRISTOPHER B. BURKE ENGINEERING, LTD**
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500
PROFESSIONAL DESIGN FIRM NO. 184-001175
EXPIRATION DATE: 4/30/2021

CONSTRUCTION SET
10 / 25 / 2019

GENERAL NOTES

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE LATEST REVISION; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; (IMUTCD); THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS", (SSTCI); "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", JULY 2014 SEVENTH EDITION, THE "DETAILS" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.

CODES OF THE IEPA TITLE 35, AND O.S.H.A. SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

ALL REQUIRED PERMITS FROM THE PROPER GOVERNING AGENCY SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE 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 AGENCY, AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.

UTILITIES

COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRECONSTRUCTION CONFERENCE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS OWN EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE VILLAGE. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

BEFORE STARTING ANY EXCAVATING, THE CONTRACTOR SHALL CALL "J.U.L.I.E. AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, CABLE AND GAS FACILITIES AND THE VILLAGE OF OAK LAWN FOR FIELD LOCATIONS OF BURIED WATER, SANITARY AND STORM FACILITIES (48-HOUR ADVANCE NOTIFICATION IS REQUIRED).

THE ENGINEERING DEPARTMENT AT 708-636-4400 AND THE PUBLIC WORKS DEPARTMENT AT 708-499-7756 SHALL BE NOTIFIED 48-HOURS PRIOR TO CONSTRUCTION AND ALL TESTING.

ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND TO THE SATISFACTION OF THE UTILITY OWNER.

STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE VILLAGE, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES OF ALL NEW, ADJUSTED OR RECONSTRUCTED STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF THE STRUCTURE, ADJUSTMENT OR RECONSTRUCTION COST.

DRAINAGE STRUCTURE OFFSETS AS SHOWN ON THE PLANS ARE GIVEN TO THE FOLLOWING POINTS:

- (A) FOR STRUCTURES FALLING IN THE CURB LINE - TO THE EDGE OF PAVEMENT.
- (B) FOR ALL OTHER STRUCTURES - TO THE CENTER OF THE STRUCTURE.

RIM ELEVATIONS SHOWN ON THE PLANS FOR DRAINAGE STRUCTURES IN THE CURB LINE ARE EDGE OF PAVEMENT ELEVATIONS.

WATER, STORM SEWER AND SANITARY SEWER

WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE STORM SEWER.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE STORM SEWER.

ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE VILLAGE.

THE COST OF CONNECTING EXISTING STORM SEWERS TO THE PROPOSED DRAINAGE SYSTEM AND CONNECTING PROPOSED STORM SEWER TO EXISTING STRUCTURES SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE FOR STORM SEWERS. HOWEVER, THE NECESSARY PIPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR "STORM SEWER" OF THE TYPE AND SIZE REQUIRED.

THE ENDS OF EXISTING DRAINAGE LINES AND HOLES IN EXISTING MANHOLES WHICH ARE NOT TO BE INCORPORATED INTO THE PROPOSED IMPROVEMENTS DESIGNATED BY THE ENGINEER SHALL BE SEALED WITH A PORTLAND CEMENT MORTAR TO THE SATISFACTION OF THE ENGINEER. COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE STRUCTURE.

THE CONTRACTOR SHALL CONFIRM ALL EXISTING STORM SEWER PIPE SIZES AND INVERTS PRIOR TO ORDERING STRUCTURES. ANY MODIFICATION OF STRUCTURES DUE TO THE FAILURE OF THE CONTRACTOR TO PERFORM THIS TASK SHALL BE AT THE CONTRACTOR'S EXPENSE AND MAY LEAD TO THE REJECTION OF THE STRUCTURE IN THE FIELD.

THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR AUTHORIZATION FROM THE VILLAGE WATER DEPARTMENT. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

ANY PORTIONS OF STORM SEWER AND MISSION COUPLINGS NEEDED TO CONNECT (EXTEND) EXISTING STORM SEWER TO PROPOSED STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE STRUCTURE. PROPOSED STORM SEWER SHALL BE STORM SEWER OF THE TYPE AND SIZE REQUIRED.

WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, THE FOLLOWING METHOD SHALL BE USED:

1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP": MACHINE OR OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.

ALL TRENCHES RESULTING FROM THE CONSTRUCTION OF WATER MAIN AND SEWER AND SERVICE PIPE SHALL BE BACKFILLED WITH COMPACTED TRENCH BACKFILL ACCORDING TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

SEWER CONSTRUCTION-PIPE SEWERS: ALL WORK SHALL CONFORM TO THE PROVISIONS OF THE STANDARD SPECIFICATIONS EXCEPT AS SAME MAY BE MODIFIED BY THE FOLLOWING: CONSTRUCTION SHALL COMMENCE AT THE EXISTING MANHOLES AS SHOWN ON THE PLANS. A TIGHT PLUG SHALL BE PLACED AND LEFT IN PLACE AT THE POINT OF COMMENCEMENT UNTIL THE BALANCE OF THE SEWERS HAVE BEEN COMPLETED AND CHECKED AND ARE READY FOR ACCEPTANCE. ALL WATER FROM THE TRENCH AND PIPELINES ABOVE THE MANHOLES WILL BE PUMPED OUT BY THE CONTRACTOR AND DISPOSED OF IN SUCH A MANNER THAT IT WILL NOT INTERFERE OR DAMAGE THE WORK OF THIS OR OTHER CONTRACTORS. PUMPING SHALL BE CONTINUOUS (24 HOURS A DAY, SEVEN DAYS A WEEK) AS LONG AS SUFFICIENT WATER COLLECTS TO WARRANT THIS. STORM SEWERS IN THE AREA MAY BE USED TO DISPOSE OF THE WATER COLLECTED, IF APPROVED BY THE VILLAGE.

GRANULAR TRENCH BACKFILL FOR SERVICE LINES: THE CONTRACTOR SHALL FURNISH AND INSTALL GRANULAR TRENCH BACKFILL IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE IMPROVEMENT PLANS AT ALL LOCATIONS WHERE TRENCHES FOR SANITARY SEWER LINES ARE BENEATH OR WITHIN TWO (2) FEET OF AREAS TO BE PAVED.

BACKFILL

STORM SEWER SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07.

ALL TRENCH BACKFILL QUANTITIES FOR STORM AND SANITARY SEWER HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE, BASED ON INVERT DEPTH FROM EXISTING PAVEMENT.

ANY TRENCH BACKFILL REQUIRED IN EXCESS OF THE QUANTITY ESTABLISHED IN THE TRENCH BACKFILL TABLE, INCLUDING BEDDING MATERIAL, SHALL BE INCLUDED IN THE COST OF THE PROPOSED WATERMAIN PIPE.

ALL SANITARY SEWERS, WATER MAINS AND STORM SEWERS MUST BE PLACED ON PROPERLY COMPACTED BEDDING. BEDDING MATERIAL SHALL BE PLACED A MINIMUM OF 4 INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE MATERIAL SHALL BE EXTENDED 1' OVER THE TOP OF PIPE. BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING GRADATION CA-7 OR CA-11.

TRENCH BACKFILL MATERIAL (CA-6 CRUSHED STONE) SHALL BE PLACED FROM 12" ABOVE THE PIPE AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY (A.S.T.M. D-1557) OVER ALL UNDERGROUND UTILITIES WHICH ARE CONSTRUCTED UNDER, OR WITHIN 2 FEET OF ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS, OR SIDEWALKS.

SUBSURFACE EXPLORATION DATA

LIMITED INVESTIGATION OF SUBSURFACE CONDITIONS AT THE PROPOSED SITE OF WORK HAS BEEN MADE FOR THE PURPOSE OF DESIGN. THE VILLAGE OF OAK LAWN, TESTING SERVICE CORPORATION, AND CHRISTOPHER B. BURKE ENGINEERING, LTD. ASSUME NO RESPONSIBILITY WHATSOEVER WITH RESPECT TO THE SUFFICIENCY OR ACCURACY OF THESE PRELIMINARY INVESTIGATIONS, NOR THEIR INTERPRETATION, AND THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED THAT CONDITIONS INDICATED ARE REPRESENTATIVE OF THOSE EXISTING THROUGHOUT THE WORK OR ANY PART OF IT, OR THAT UNFORESEEN DEVELOPMENTS MAY OCCUR.

ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER, AND STATE AND LOCAL TIPPING FEES.

MISCELLANEOUS

DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. THIS INCLUDES VERIFYING ALL PIPE SIZES FOR PROPOSED STRUCTURES.

ALL SAWCUTTING SHALL BE INCLUDED IN THE REMOVAL ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

SIDEWALK RAMPS FOR THE HANDICAPPED SHALL BE INSTALLED AT ALL INTERSECTING STREETS AND DRIVEWAYS AS DIRECTED BY THE ENGINEER (SEE SPECIFICATIONS FOR CONSTRUCTION DETAILS AND IDOT HIGHWAY STANDARDS 424001-08, 424006-02, 424011-02).

DEPRESSED CURB: RAMPS OR DEPRESSED CURBS ACCESSIBLE TO THE HANDICAPPED SHALL BE PROVIDED AT ALL CROSSWALKS AND BICYCLE PATHS. NON-ADA DEPRESSED CURB SHALL BE PROVIDED AT ALL ALLEYS OR DRIVEWAYS.

BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED. (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.)

RELOCATING EXISTING SIGNS: EXISTING SIGNS WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF CONFLICTING IMPROVEMENTS IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS". THIS WORK SHALL BE INCLUDED IN THE COST OF THE WATER MAIN.

PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE PROVIDED WHERE OPERATIONS ABUT PUBLIC THROUGHFARES AND ADJACENT PROPERTY.

NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.

BEFORE INITIAL ACCEPTANCE BY THE VILLAGE, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE VILLAGE OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF INITIAL ACCEPTANCE AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.

THE CONTRACTOR SHALL INSTALL EJ DURALAST DETECTABLE WARNING PLATES. THE TILES SHALL BE 24"x60" WITH DOME SPACING OF 2.35" AND "BRICK RED" IN COLOR. WHERE APPLICABLE, EJ DURALAST RADIUS TRUNCATED DOME DETECTABLE WARNING SYSTEM SHALL BE UTILIZED. THE COLOR OF RADIUS SYSTEM SHALL BE "BRICK RED." THE DETECTABLE WARNING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE PLANS AND DETAILS OR AS REQUIRED BY THE ENGINEER.

ANY AREA OUTSIDE THE PROPERTY LINE USED BY THE GENERAL OR SUB-CONTRACTORS SHALL BE RETURNED TO THE STATE IT WAS FOUND PRIOR TO NEW CONSTRUCTION, EXCEPT WHERE NEW WORK IS SHOWN.

NO CONSTRUCTION ACTIVITY SHALL BEGIN UNTIL ALL PROPER SIGNS AND BARRICADES HAVE BEEN INSTALLED.

CONSTRUCTION WATER FOR THE PROPOSED IMPROVEMENTS WILL BE AVAILABLE TO THE CONTRACTOR AT THE VILLAGE OF OAK LAWN PUBLIC WORKS LOCATED AT 5532 WEST 98TH STREET, OAK LAWN, IL.

PERMIT MATRIX

Agency	Submittal Date	Receipt Date
USACE	11/29/2018	5/15/2018
IEPA - SWPPP	2/12/2018	3/13/2018
MWRD	2/5/2018 Re-Submit 3/15/2018	3/23/2018
IDNR-OWR Floodway Construction	2/5/2018	4/19/2018

UTILITY COMPANY	DATE SENT TO UTILITY COMPANY	RESPONSE DATE	COMMENTS
AT&T (DISTRIBUTION) 1000 COMMERCE DRIVE, FLOOR 1 OAK BROOK, IL 60523 ATTN: STEVE LARSON PH: (630) 573-5450 EMAIL: g11629@att.com	2/5/2018	3/3/2018	NO CONFLICTS ANTICIPATED
COMCAST 688 INDUSTRIAL DRIVE ELMHURST, IL 60126 ATTN: MARTHA GIERAS PH: (224) 229-5862 EMAIL: martha_gieras@cable.comcast.com	2/5/2018	2/23/2018	NO CONFLICTS ANTICIPATED
COMMONWEALTH EDISON 2 LINCOLN CENTER OAKBROOK TERRACE, IL 60181 ATTN: JIM PETO PH: (078) 235-2422 EMAIL: james.peto@comed.com	2/5/2018	8/7/2019	NO CONFLICTS ANTICIPATED
NICOR GAS 1844 FERRY ROAD NAPERVILLE, IL 60563 ATTN: BRUCE KOPPANG PH: (630) 388-3046 EMAIL: bkoppan@aglresources.com	2/5/2018	3/1/2018	NO CONFLICTS ANTICIPATED
SPRINT NEXTEL CORPORATION 5600 N. RIVER ROAD, SUITE 200 ROSEMONT, IL 60018 ATTN: JIM BURTON PH: (708) 955-6659 EMAIL: james.m.burton@sprint.com	2/5/2018		

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:



VILLAGE OF OAK LAWN
9446 SOUTH RAYMOND AVENUE
OAK LAWN, ILLINOIS 60453

DSGN.	JAL	
DWN.	PMM	
CHKD.	LMF	
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PLOT DATE:	10/25/2019	
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TITLE:

PROJ. NO. 17-0048

DATE: 10/25/2019

SHEET 2 OF 38

DRAWING NO.

GEN

GENERAL NOTES

A. REFERENCED SPECIFICATIONS

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
 * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 * VILLAGE OF OAK LAWN MUNICIPAL CODE;
 * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
 * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

- THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).
- THE VILLAGE OF OAK LAWN ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

- ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.
- THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

- THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
- DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.
- ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)		
ASTM D-3350	ASTM D-3261, F-2620 (HEAT FUSION)	
ASTM D-3035	ASTM D-3212, F-477 (GASKETED)	
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

- ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE 1/4 " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.
- ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICK-HOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.
- WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
 a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
 b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
 c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.
- WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMANS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.
- ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.
- ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.
- EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.
- A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

- THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.
- ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
 a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
 b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.
- MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.
- ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).
- VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.
- EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.
- STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMANS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
- ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

07/12/2016

STD. DWG. NO.18

PAGE NO. 19

CHRISTOPHER B. BURKE ENGINEERING, LTD.
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CLIENT:

VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
FILE NAME	N:\OakLawn\170048\Civil\NOT-02.170048.SHT			

TITLE:

MWRD GENERAL NOTES

PROJ. NO. 17-0048

DATE: 10/25/2019

SHEET 3 OF 38

DRAWING NO.

GEN

SUMMARY OF QUANTITIES

CODE	ITEMS	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	800
20400800	FURNISHED EXCAVATION	CU YD	175
20900110	POROUS GRANULAR BACKFILL	CU YD	40
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	11,325
25000115	SEEDING, CLASS 1B	SQ YD	11,325
25100630	EROSION CONTROL BLANKET, NAG S75BN	SQ YD	11,325
28000400	SILT FENCE	FOOT	3,200
28000510	INLET FILTERS	EACH	10
*28100101	CLASS RR3 RIPRAP CHINKED WITH CA-7	SQ YD	2,250
*28100101	CLASS RR4 RIPRAP CHINKED WITH CA-7	SQ YD	1,000
28200200	FILTER FABRIC	SQ YD	2,550
*42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH (SPECIAL)	SQ FT	100
44000600	SIDEWALK REMOVAL	SQ YD	450
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	50
50100100	REMOVAL OF EXISTING STRUCTURES (OUTLOOKS)	EACH	4
50200100	STRUCTURE EXCAVATION	CU YD	55
50300225	CONCRETE STRUCTURES	CU YD	29
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	12,350
51603000	DRILLED SHAFT IN SOIL	CU YD	53
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	15
*60603500	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (SPECIAL)	FOOT	500
66400305	CHAIN LINK FENCE, 6'	FOOT	1,500
67100100	MOBILIZATION	L. SUM	1
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM	1
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400200	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	2,650
81100700	CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	4
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	15,590
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	150
82500350	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240V, 100A	EACH	1
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	16
83600350	LIGHT POLE FOUNDATION, METAL	EACH	24
84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	11
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	2
*Z0003850	BENCHES	EACH	2
*Z0064600	SELECTIVE CLEARING	L. SUM	1
*Z0013797	STABILIZED CONSTRUCTION ENTRANCE	EACH	2
*Z0013798	CONSTRUCTION LAYOUT	L. SUM	1
*Z0046304	PIPE UNDERDRAIN FOR STRUCTURES, 4"	FOOT	40
A2001030	TREE, ACER RUBRUM SCARLET SENTINEL (SCARLET SENTINEL MAPLE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	1
A2004515	TREE, GINKGO BILOBA AUTUMN GOLD (AUTUMN GOLD GINKGO), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	3
A2004824	TREE, GLEDITSIA TRIACANTHOS INERMIS SKYLINE (SKYLINE THORNLESS COMMON HONEYLOCUST), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	3
A2008124	TREE, TILIA CORDATA GREENSPRE (GREENSPRE LITTLE LEAF LINDEN), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	2
A2008618	TREE, ULMUS MORTON GLOSSY (TRIUMPH ELM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	3
C2C00124	SHRUB, AESCULUS PARVIFLORA (BOTTLEBRUSH BUCKEYE), 2' HEIGHT, CONTAINER	EACH	3
C2C00524	SHRUB, ARONIA MELANOCARPA (BLACK CHOKE BERRY), 2' HEIGHT, CONTAINER	EACH	85
C2C01324	SHRUB, CLETHRA ALNIFOLIA (SUMMERSWEET CLETHRA), 2' HEIGHT, CONTAINER	EACH	4
C20023G5	SHRUB, DIERVILLA LONICERA (BUSH HONEY SUCKLE), 5-GALLON	EACH	19
C20023G5	DIERVILLA 'GZX88541' (KODIAK RED BUSH HONEY SUCKLE), 5-GALLON	EACH	54
C20058G5	SHRUB, RHUS AROMATICA GRO-LOW (GRO-LOW FRAGRANT SUMAC), 5-GALLON	EACH	143
C2011748	SHRUB, VIBURNUM DENTATUM (ARROWWOOD VIBURNUM), 4' HEIGHT, BALLED AND BURLAPPED	EACH	28
C2015302	SHRUB, JUNIPERUS CHINENSIS KALLA Y'S COMPACTA, (KALLA Y COMPACT JUNIPER), 5-GALLON	EACH	6
D2000730	EVERGREEN, JUNIPERUS CHINENSIS VAR. SARGENTII VIVIDIS (GREEN SARGENT JUNIPER), 2.5' WIDTH, CONTAINER	EACH	13
K0012990	PANICUM VIRGATUM 'SHENANDOAH' (SHENANDOAH RED SWITCH GRASS), #1, CONTAINER	EACH	63
K0012990	SPOROBOLUS HETEROLEPIS (PRAIRIE DROPSEED), #1, CONTAINER	EACH	8
*X0322924	RETAINING WALL REMOVAL	SQ FT	1,550
*X0324390	FLOOD LIGHTING UNIT	EACH	2
*X0326654	ORNAMENTAL LIGHT UNIT, COMPLETE	EACH	24
*X0326862	STRUCTURES TO BE ADJUSTED	EACH	1
*XX000959	TRASH RECEPTACLES	EACH	2
*NA	SILT CURTAIN	FOOT	1,400
*NA	DEWATERING	L. SUM	1
*NA	DREDGING	CU YD	500
*NA	MAINTENANCE OF EXISTING LIGHTING SYSTEMS	L. SUM	1
*NA	REMOVE EXISTING SITE AERATION EQUIPMENT	L. SUM	1
*NA	SITE AERATION EQUIPMENT	L. SUM	1
*NA	STAIR REMOVAL	EACH	2
*NA	TIMBER OUTLOOK	EACH	2

*INDICATES SPECIAL PROVISION

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 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
FILE NAME	N:\OakLawn\170048\Civil\QUA_I70048.SHT			

DSGN.	JAL	TITLE:
DWN.	PMM	
CHKD.	LMF	
SCALE:	N.T.S.	
PLOT DATE:	10/25/2019	<p align="center">SUMMARY OF QUANTITIES</p>
CAD USER:	Jlapaglia	
MODEL:	Default	

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 4 OF 38
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SOQ

EARTHWORK SCHEDULE

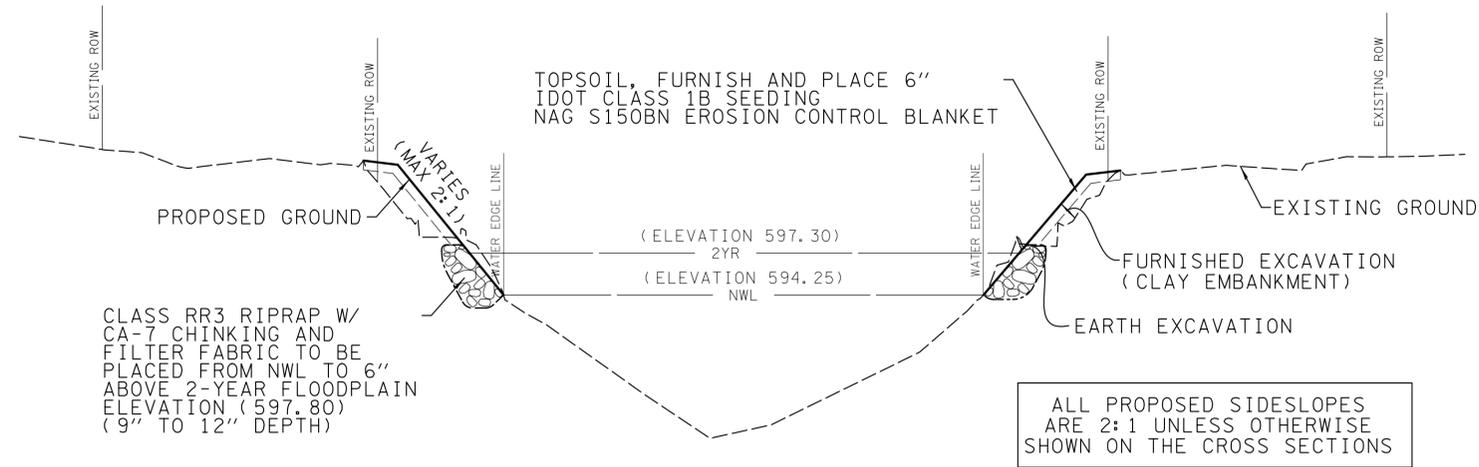
STA.	DIST. (FT)	CUT VOLUME			FILL VOLUME			
		AREA (SF)	AVE. AREA (SF)	VOLUME (CY)	AREA (SF)	AVE. AREA (SF)	VOLUME (CY)	
100+02		5.00			1.50			
	20		2.78	2.06		8.11	6.00	
100+22		0.56			14.71			
	20		3.02	2.23		10.02	7.42	
100+42		5.47			5.32			
	20		9.63	7.13		2.94	2.17	
100+62		13.78			0.55			
	20		19.97	14.79		0.38	0.28	
100+82		26.15			0.20			
	18		29.34	19.56		0.11	0.07	
101+00		32.53			0.01			
	50		20.82	38.56		7.44	13.78	
101+50		9.11			14.87			
	50		52.17	96.60		9.67	17.91	
102+00		95.22			4.47			
	50		51.82	95.96		2.99	5.53	
102+50		8.42			1.50			
	50		6.17	11.42		2.00	3.69	
103+00		3.91			2.49			
	50		7.31	13.54		3.59	6.65	
103+50		10.71			4.69			
	50		10.67	19.76		4.38	8.10	
104+00		10.63			4.06			
	50		7.52	13.92		5.13	9.50	
104+50		4.40			6.20			
	50		5.61	10.39		3.95	7.31	
105+00		6.82			1.69			
	50		8.88	16.44		1.03	1.91	
105+50		10.94			0.37			
	50		28.83	53.38		2.14	3.95	
106+00		46.71			3.90			
	25		68.29	63.23		2.72	2.51	
106+25		89.86			1.53			
	25		52.16	48.30		1.64	1.51	
106+50		14.46			1.74			
	50		37.45	69.35		4.95	9.17	
107+00		60.44			8.16			
	50		32.64	60.44		9.60	17.77	
107+50		4.83			11.03			
	50		9.95	18.43		7.23	13.38	
108+00		15.07			3.42			
	50		24.97	46.24		5.52	10.21	
108+50		34.87			7.61			
	50		22.60	41.84		6.35	11.75	
109+00		10.32			5.08			
	50		6.05	11.19		2.54	4.70	
109+50		1.77			0.00			
	50		0.89	1.64		0.00	0.00	
110+00		0.00			0.00			
		TOTAL =			776.39	TOTAL =		165.28

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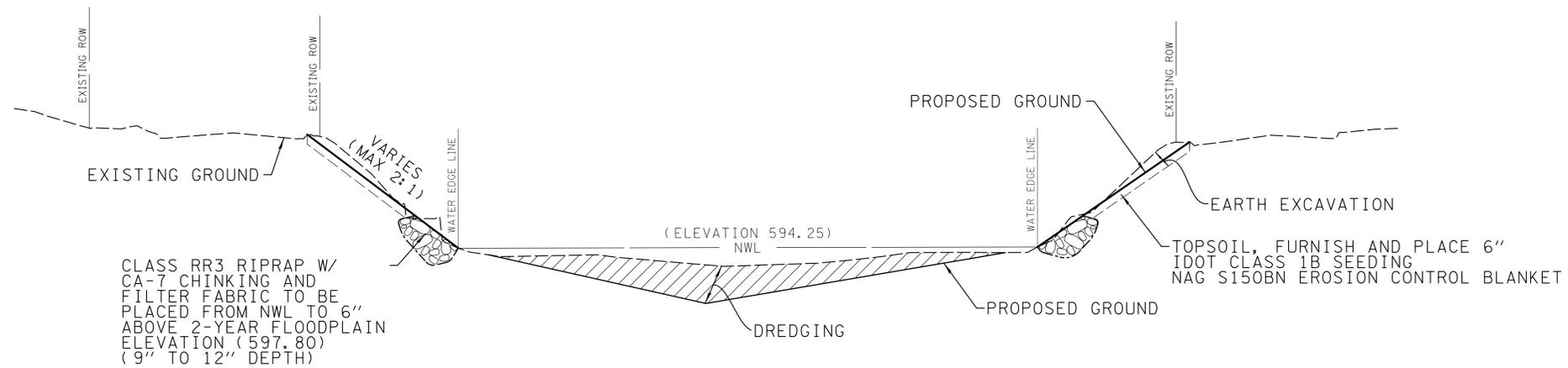
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FILE NAME	N:\OakLawn\170048\Civil\SCH_170048.SHT					

EARTHWORK SCHEDULE	PROJ. NO. 17-0048
	DATE: 10/25/2019
	SHEET 5 OF 38
	DRAWING NO.
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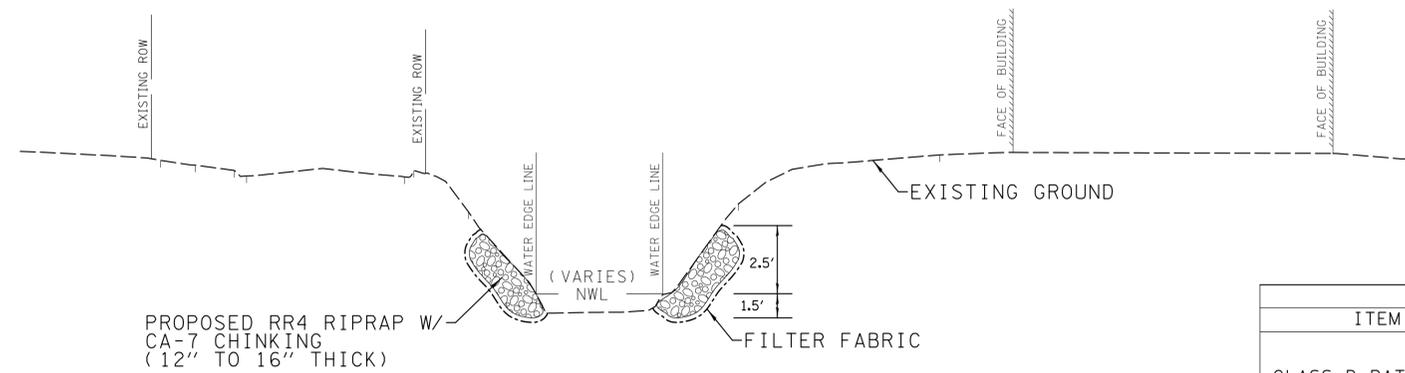
PROPOSED TYPICAL SECTION

STA. 100+00 - STA. 110+00



PROPOSED TYPICAL SECTION - DREDGING

STATIONS VARY - DREDGING TO BE COMPLETED PER THE CROSS SECTIONS

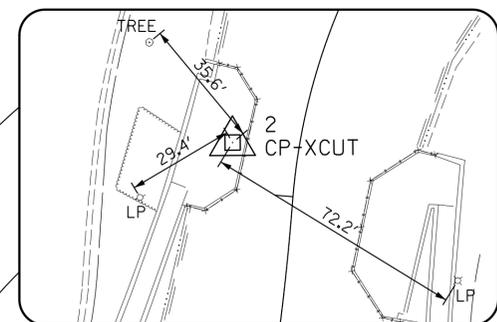
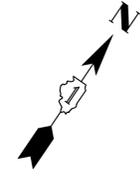
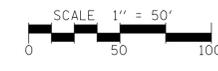


PROPOSED TYPICAL SECTION

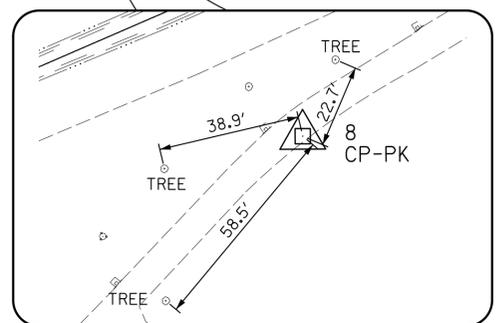
STA. 110+00 - STA. 116+85

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
ITEM	MIX	VOIDS
CLASS D PATCHES, 6" (SPECIAL)	HOT-MIX ASPHALT SURFACE COURSE, IL-19.0, N50, 2"	4% @ 50 GYR.
	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 4"	4% @ 50 GYR.

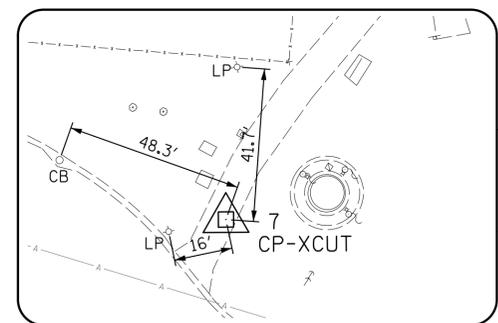
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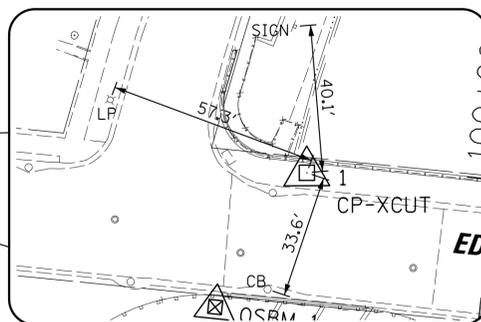
CP 2
STA. 102 + 12.03, 18.18' LT
N 1839671.23, E 1140923.35



CP 8
STA. 115 + 08.71, 46.00' RT
N 1840643.92, E 1141735.43



CP 7
STA. 112 + 97.64, 191.90' RT
N 1840351.89, E 1141691.39



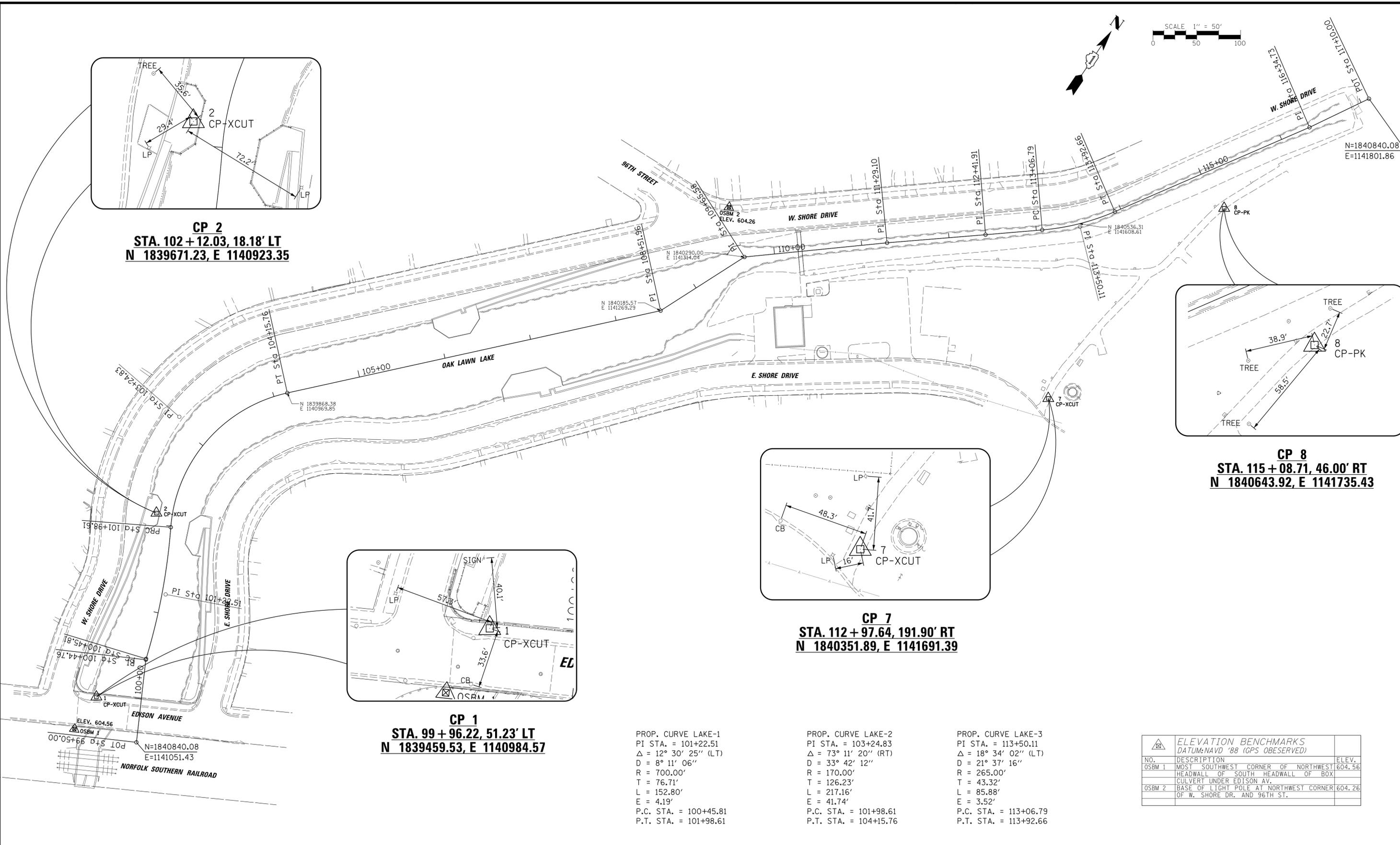
CP 1
STA. 99 + 96.22, 51.23' LT
N 1839459.53, E 1140984.57

PROP. CURVE LAKE-1
 PI STA. = 101+22.51
 $\Delta = 12^\circ 30' 25''$ (LT)
 $D = 8^\circ 11' 06''$
 $R = 700.00'$
 $T = 76.71'$
 $L = 152.80'$
 $E = 4.19'$
 P.C. STA. = 100+45.81
 P.T. STA. = 101+98.61

PROP. CURVE LAKE-2
 PI STA. = 103+24.83
 $\Delta = 73^\circ 11' 20''$ (RT)
 $D = 33^\circ 42' 12''$
 $R = 170.00'$
 $T = 126.23'$
 $L = 217.16'$
 $E = 41.74'$
 P.C. STA. = 101+98.61
 P.T. STA. = 104+15.76

PROP. CURVE LAKE-3
 PI STA. = 113+50.11
 $\Delta = 18^\circ 34' 02''$ (LT)
 $D = 21^\circ 37' 16''$
 $R = 265.00'$
 $T = 43.32'$
 $L = 85.88'$
 $E = 3.52'$
 P.C. STA. = 113+06.79
 P.T. STA. = 113+92.66

ELEVATION BENCHMARKS DATUM: NAVD '88 (GPS OBSERVED)		
NO.	DESCRIPTION	ELEV.
OSBM 1	MOST SOUTHWEST CORNER OF NORTHWEST HEADWALL OF SOUTH HEADWALL OF BOX CULVERT UNDER EDISON AV.	604.56
OSBM 2	BASE OF LIGHT POLE AT NORTHWEST CORNER OF W. SHORE DR. AND 96TH ST.	604.26



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 Rosemont, Illinois 60018
 (847) 823-0500

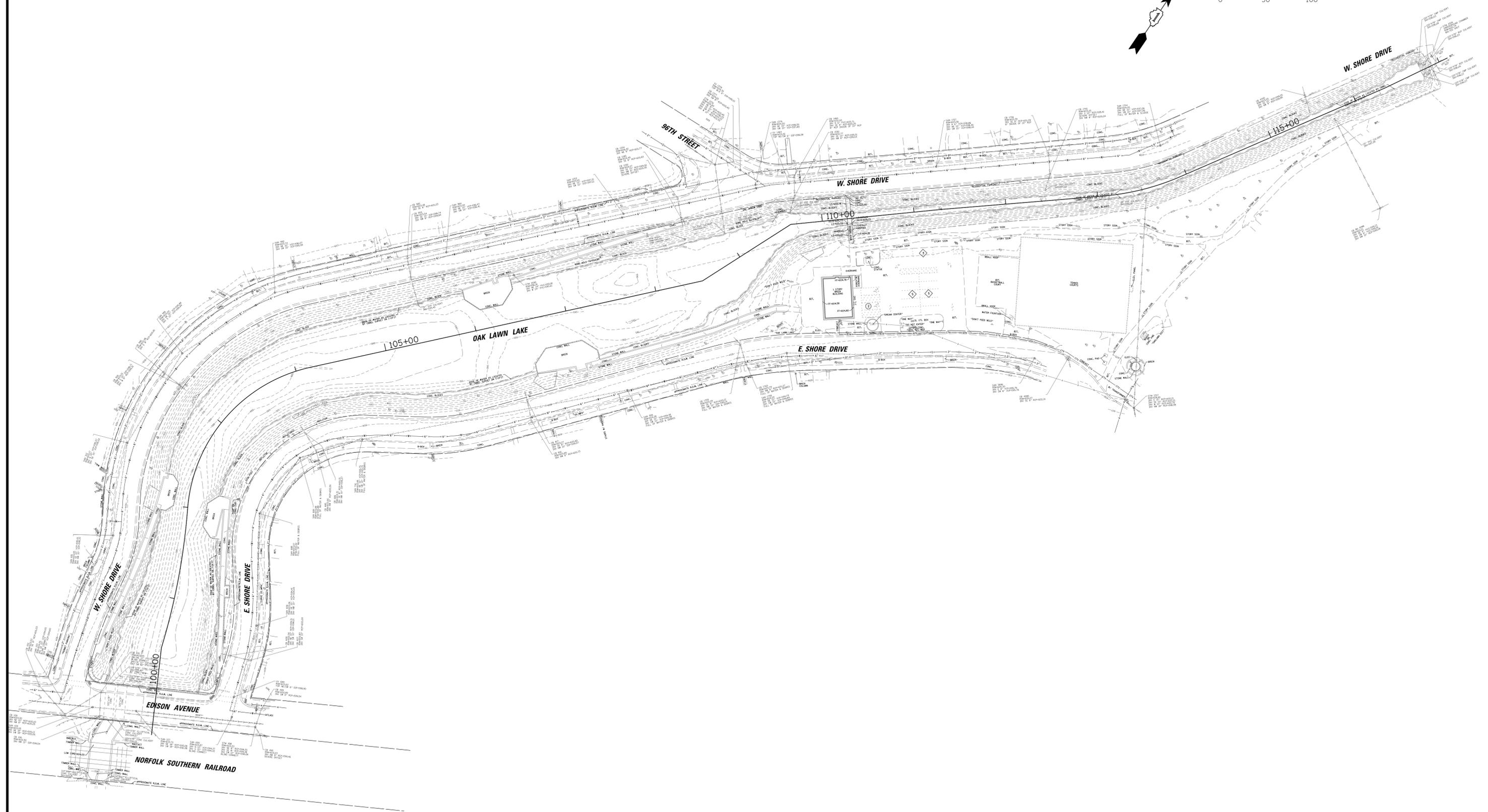
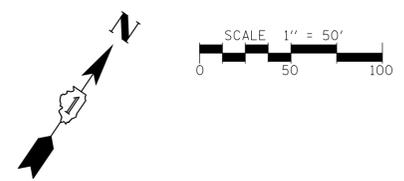
CLIENT:
VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
FILE NAME	N:\OakLawn\170048\Civil\BNH_170048.SHT			

DSGN. JAL
 DWN. PMM
 CHKD. BG
 SCALE: 50'
 PLOT DATE: 10/25/2019
 CAD USER: Jlapaglia
 MODEL: Default

TITLE:
ALIGNMENT, TIES AND BENCHMARKS

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 7 OF 38
 DRAWING NO.
BNH



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 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
				Default
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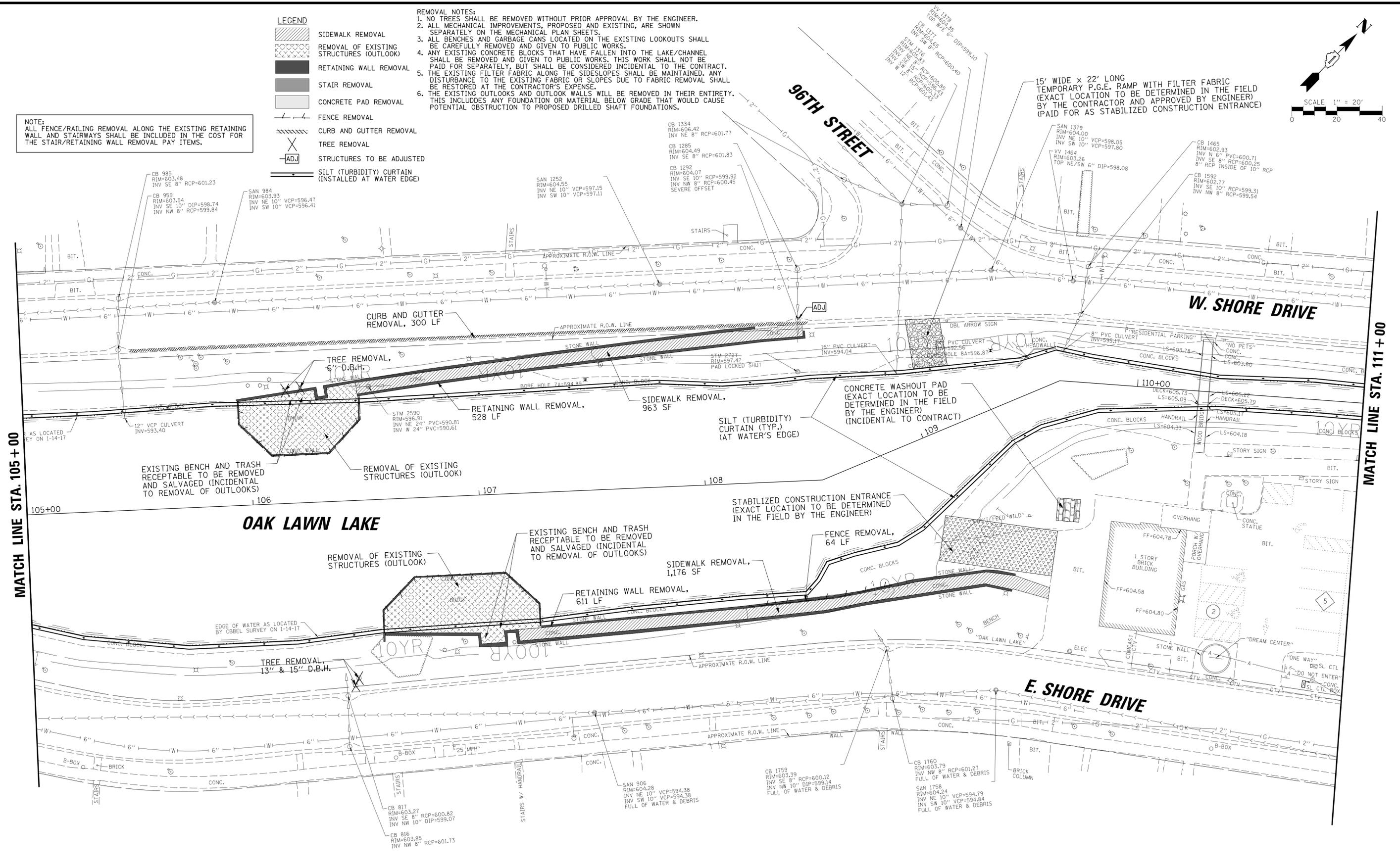
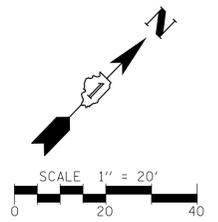
TITLE:
OVERALL SITE PLAN

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 8 OF 38
 DRAWING NO.
SITE

- LEGEND**
- SIDEWALK REMOVAL
 - REMOVAL OF EXISTING STRUCTURES (OUTLOOK)
 - RETAINING WALL REMOVAL
 - STAIR REMOVAL
 - CONCRETE PAD REMOVAL
 - FENCE REMOVAL
 - CURB AND GUTTER REMOVAL
 - TREE REMOVAL
 - STRUCTURES TO BE ADJUSTED
 - SILT (TURBIDITY) CURTAIN (INSTALLED AT WATER EDGE)

NOTE:
ALL FENCE/RAILING REMOVAL ALONG THE EXISTING RETAINING WALL AND STAIRWAYS SHALL BE INCLUDED IN THE COST FOR THE STAIR/RETAINING WALL REMOVAL PAY ITEMS.

- REMOVAL NOTES:**
- NO TREES SHALL BE REMOVED WITHOUT PRIOR APPROVAL BY THE ENGINEER.
 - ALL MECHANICAL IMPROVEMENTS, PROPOSED AND EXISTING, ARE SHOWN SEPARATELY ON THE MECHANICAL PLAN SHEETS.
 - ALL BENCHES AND GARBAGE CANS LOCATED ON THE EXISTING LOOKOUTS SHALL BE CAREFULLY REMOVED AND GIVEN TO PUBLIC WORKS.
 - ANY EXISTING CONCRETE BLOCKS THAT HAVE FALLEN INTO THE LAKE/CHANNEL SHALL BE REMOVED AND GIVEN TO PUBLIC WORKS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 - THE EXISTING FILTER FABRIC ALONG THE SIDESLOPES SHALL BE MAINTAINED. ANY DISTURBANCE TO THE EXISTING FABRIC OR SLOPES DUE TO FABRIC REMOVAL SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.
 - THE EXISTING OUTLOOKS AND OUTLOOK WALLS WILL BE REMOVED IN THEIR ENTIRETY. THIS INCLUDES ANY FOUNDATION OR MATERIAL BELOW GRADE THAT WOULD CAUSE POTENTIAL OBSTRUCTION TO PROPOSED DRILLED SHAFT FOUNDATIONS.



MATCH LINE STA. 105 + 00

MATCH LINE STA. 111 + 00

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9446 SOUTH RAYMOND AVENUE
OAK LAWN, ILLINOIS 60453

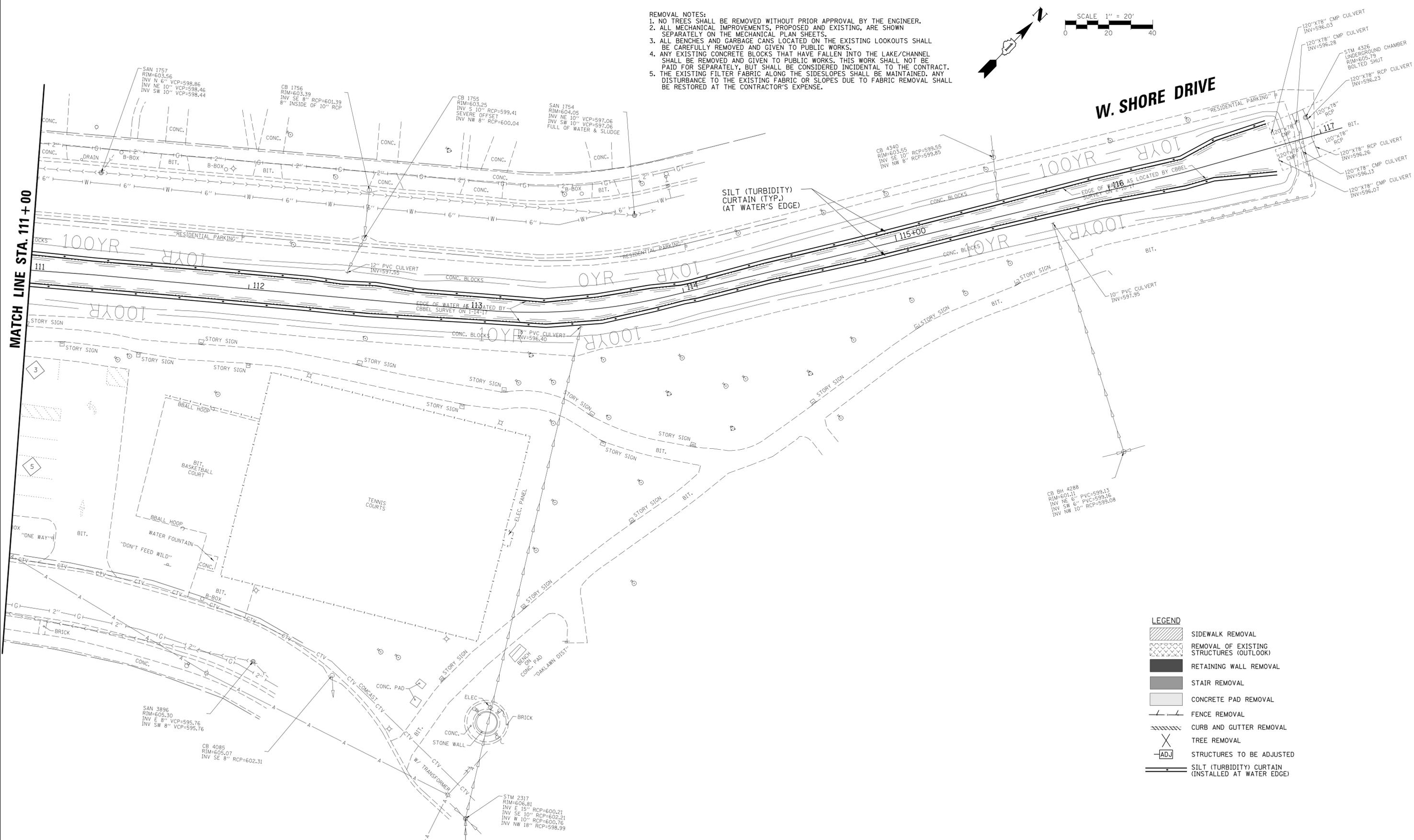
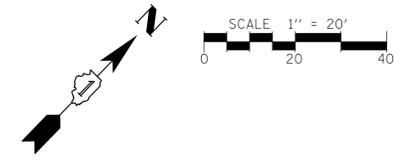
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FILE NAME	N:\OakLawn\170048\Civil\REM-02.170048.SHT			

DSGN.	JAL	TITLE:
DWN.	PM	
CHKD.	LMF	
SCALE:	20'	
PLOT DATE:	10/25/2019	
CAD USER:	Jlapaglia	
MODEL:	Default	

EXISTING CONDITIONS AND REMOVAL PLAN

PROJ. NO.	17-0048
DATE:	10/25/2019
SHEET 10	OF 38
DRAWING NO.	
REM-2	

- REMOVAL NOTES:
1. NO TREES SHALL BE REMOVED WITHOUT PRIOR APPROVAL BY THE ENGINEER.
 2. ALL MECHANICAL IMPROVEMENTS, PROPOSED AND EXISTING, ARE SHOWN SEPARATELY ON THE MECHANICAL PLAN SHEETS.
 3. ALL BENCHES AND GARBAGE CANS LOCATED ON THE EXISTING LOOKOUTS SHALL BE CAREFULLY REMOVED AND GIVEN TO PUBLIC WORKS.
 4. ANY EXISTING CONCRETE BLOCKS THAT HAVE FALLEN INTO THE LAKE/CHANNEL SHALL BE REMOVED AND GIVEN TO PUBLIC WORKS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 5. THE EXISTING FILTER FABRIC ALONG THE SIDESLOPES SHALL BE MAINTAINED. ANY DISTURBANCE TO THE EXISTING FABRIC OR SLOPES DUE TO FABRIC REMOVAL SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.



LEGEND

	SIDEWALK REMOVAL
	REMOVAL OF EXISTING STRUCTURES (OUTLOOK)
	RETAINING WALL REMOVAL
	STAIR REMOVAL
	CONCRETE PAD REMOVAL
	FENCE REMOVAL
	CURB AND GUTTER REMOVAL
	TREE REMOVAL
	STRUCTURES TO BE ADJUSTED
	SILT (TURBIDITY) CURTAIN (INSTALLED AT WATER EDGE)

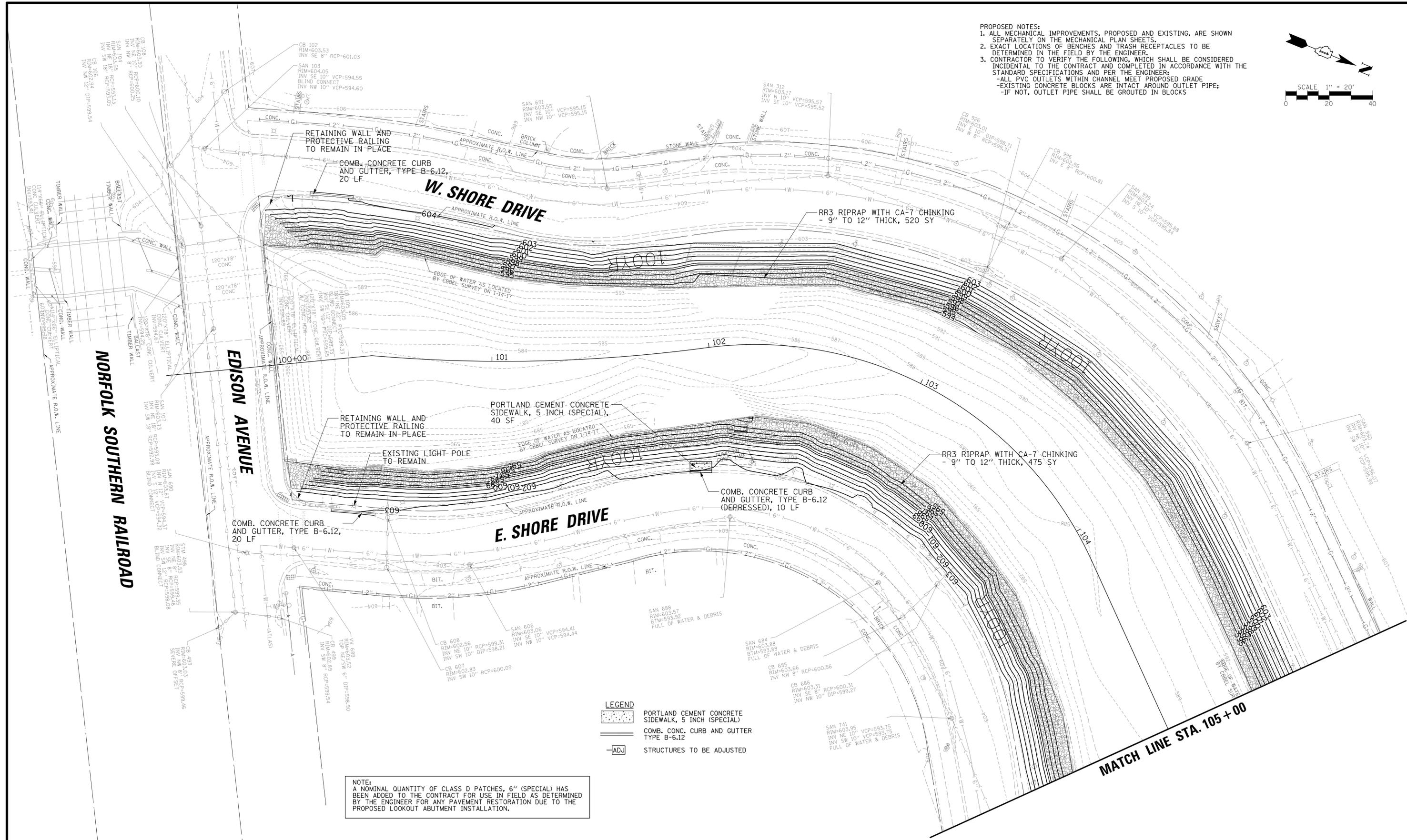
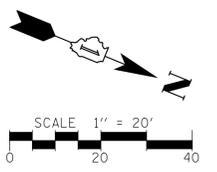
CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CLIENT:
VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
				Default

TITLE:	EXISTING CONDITIONS AND REMOVAL PLAN
PROJ. NO.	17-0048
DATE:	10/25/2019
SHEET 11 OF 38	
DRAWING NO.	REM-3

- PROPOSED NOTES:
1. ALL MECHANICAL IMPROVEMENTS, PROPOSED AND EXISTING, ARE SHOWN SEPARATELY ON THE MECHANICAL PLAN SHEETS.
 2. EXACT LOCATIONS OF BENCHES AND TRASH RECEPTACLES TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
 3. CONTRACTOR TO VERIFY THE FOLLOWING, WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND PER THE ENGINEER:
 - ALL PVC OUTLETS WITHIN CHANNEL MEET PROPOSED GRADE
 - EXISTING CONCRETE BLOCKS ARE INTACT AROUND OUTLET PIPE;
 - IF NOT, OUTLET PIPE SHALL BE GROUTED IN BLOCKS



- LEGEND**
- PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH (SPECIAL)
 - COMB. CONC. CURB AND GUTTER TYPE B-6.12
 - STRUCTURES TO BE ADJUSTED

NOTE:
 A NOMINAL QUANTITY OF CLASS D PATCHES, 6" (SPECIAL) HAS BEEN ADDED TO THE CONTRACT FOR USE IN FIELD AS DETERMINED BY THE ENGINEER FOR ANY PAVEMENT RESTORATION DUE TO THE PROPOSED LOOKOUT ABUTMENT INSTALLATION.

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 (847) 823-0500

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 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
FILE NAME	N:\OakLawn\170048\CIVIL\PRO-01\170048.SHT			

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 DWN. PMM
 CHKD. LMF
 SCALE: 20'
 PLOT DATE: 10/25/2019
 CAD USER: Jlapaglia
 MODEL: Default

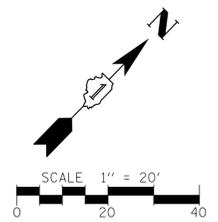
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PROPOSED GRADING AND STREAMBANK PLAN

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 12 OF 38
 DRAWING NO.
PRO-1

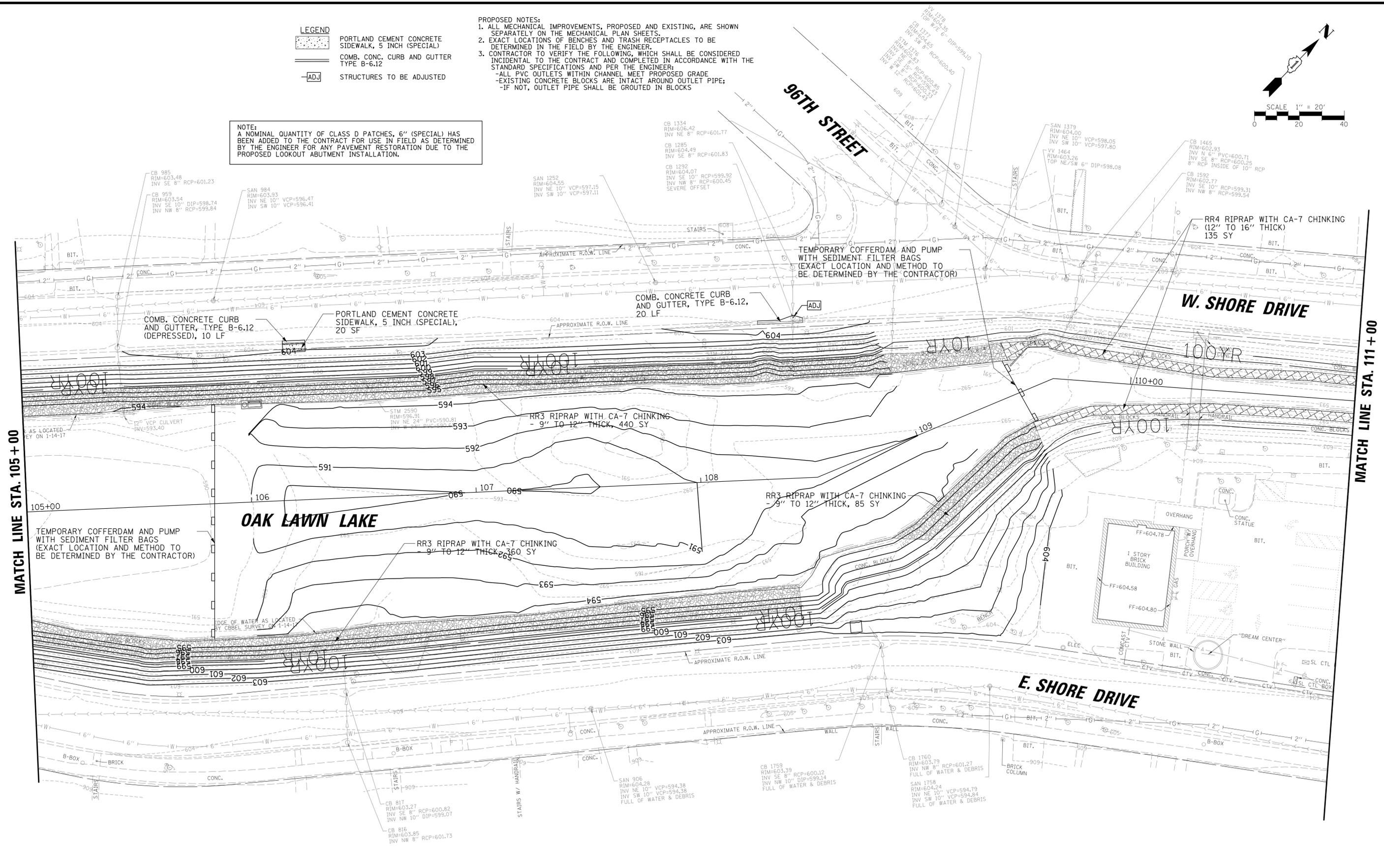
LEGEND

	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH (SPECIAL)
	COMB. CONC. CURB AND GUTTER TYPE B-6.12
	STRUCTURES TO BE ADJUSTED

- PROPOSED NOTES:**
- ALL MECHANICAL IMPROVEMENTS, PROPOSED AND EXISTING, ARE SHOWN SEPARATELY ON THE MECHANICAL PLAN SHEETS.
 - EXACT LOCATIONS OF BENCHES AND TRASH RECEPTACLES TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
 - CONTRACTOR TO VERIFY THE FOLLOWING, WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND PER THE ENGINEER:
 - ALL PVC OUTLETS WITHIN CHANNEL MEET PROPOSED GRADE
 - EXISTING CONCRETE BLOCKS ARE INTACT AROUND OUTLET PIPE;
 - IF NOT, OUTLET PIPE SHALL BE GROUTED IN BLOCKS



NOTE:
A NOMINAL QUANTITY OF CLASS D PATCHES, 6" (SPECIAL) HAS BEEN ADDED TO THE CONTRACT FOR USE IN FIELD AS DETERMINED BY THE ENGINEER FOR ANY PAVEMENT RESTORATION DUE TO THE PROPOSED LOOKOUT ABUTMENT INSTALLATION.



MATCH LINE STA. 105 + 00

MATCH LINE STA. 111 + 00

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CLIENT:

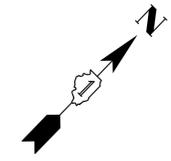
VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
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DSGN.	JAL
DWN.	PMM
CHKD.	LMF
SCALE:	20'
PLOT DATE:	10/25/2019
CAD USER:	Jlapaglia

TITLE:
PROPOSED GRADING AND STREAMBANK PLAN

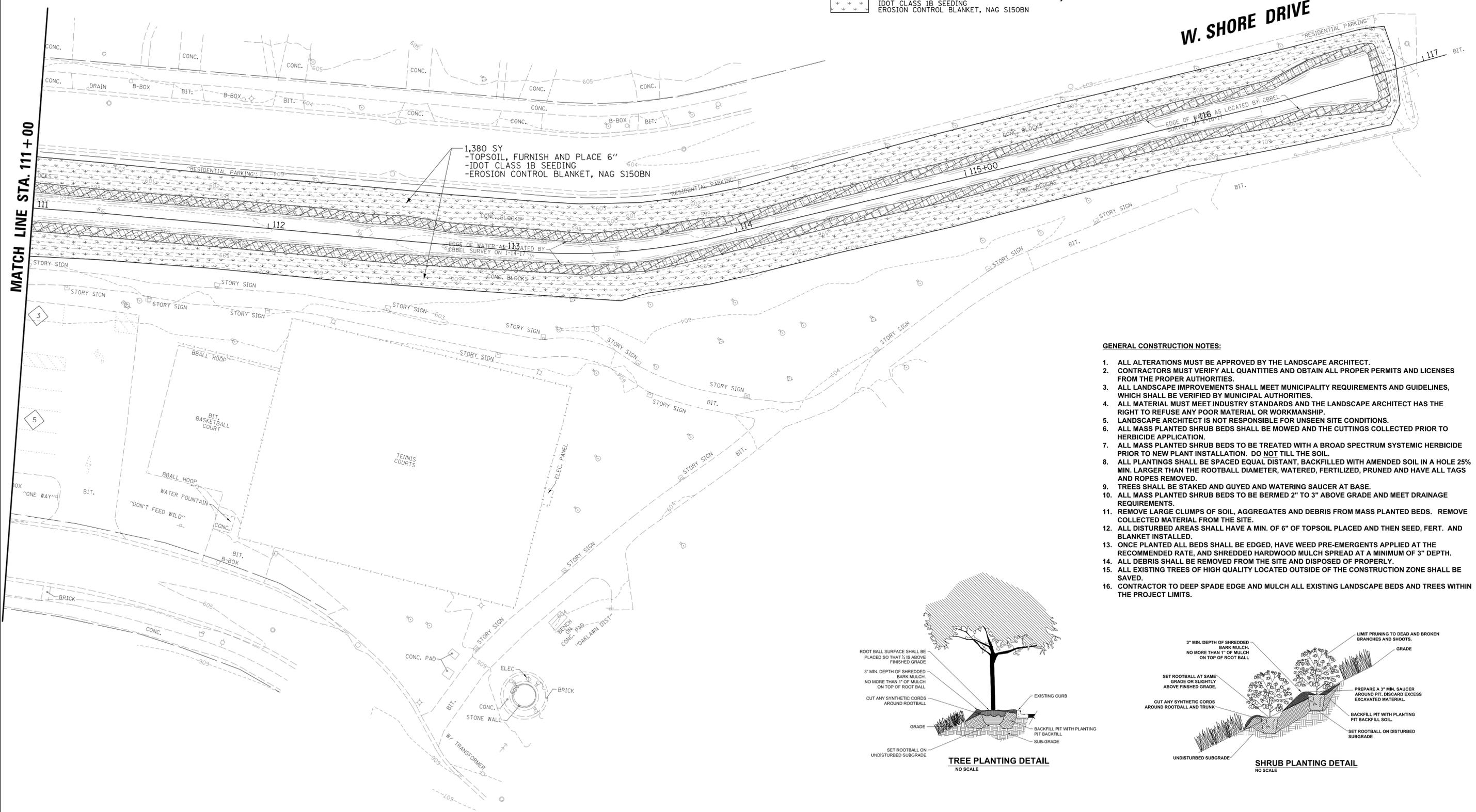
PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 13 OF 38
 DRAWING NO.
PRO-2



SCALE 1" = 20'
0 20 40

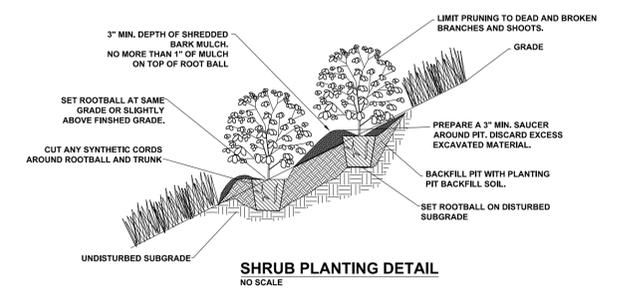
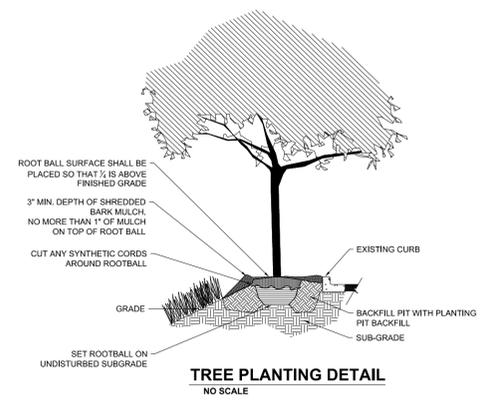
LEGEND

- TOPSOIL, FURNISH AND PLACE 6"
- IDOT CLASS 1B SEEDING
- EROSION CONTROL BLANKET, NAG S150BN



GENERAL CONSTRUCTION NOTES:

1. ALL ALTERATIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
2. CONTRACTORS MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
3. ALL LANDSCAPE IMPROVEMENTS SHALL MEET MUNICIPALITY REQUIREMENTS AND GUIDELINES, WHICH SHALL BE VERIFIED BY MUNICIPAL AUTHORITIES.
4. ALL MATERIAL MUST MEET INDUSTRY STANDARDS AND THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REFUSE ANY POOR MATERIAL OR WORKMANSHIP.
5. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
6. ALL MASS PLANTED SHRUB BEDS SHALL BE MOWED AND THE CUTTINGS COLLECTED PRIOR TO HERBICIDE APPLICATION.
7. ALL MASS PLANTED SHRUB BEDS TO BE TREATED WITH A BROAD SPECTRUM SYSTEMIC HERBICIDE PRIOR TO NEW PLANT INSTALLATION. DO NOT TILL THE SOIL.
8. ALL PLANTINGS SHALL BE SPACED EQUAL DISTANT, BACKFILLED WITH AMENDED SOIL IN A HOLE 25% MIN. LARGER THAN THE ROOTBALL DIAMETER, WATERED, FERTILIZED, PRUNED AND HAVE ALL TAGS AND ROPES REMOVED.
9. TREES SHALL BE STAKED AND GUYED AND WATERING SAUCER AT BASE.
10. ALL MASS PLANTED SHRUB BEDS TO BE BERMED 2" TO 3" ABOVE GRADE AND MEET DRAINAGE REQUIREMENTS.
11. REMOVE LARGE CLUMPS OF SOIL, AGGREGATES AND DEBRIS FROM MASS PLANTED BEDS. REMOVE COLLECTED MATERIAL FROM THE SITE.
12. ALL DISTURBED AREAS SHALL HAVE A MIN. OF 6" OF TOPSOIL PLACED AND THEN SEED, FERT. AND BLANKET INSTALLED.
13. ONCE PLANTED ALL BEDS SHALL BE EDGED, HAVE WEED PRE-EMERGENTS APPLIED AT THE RECOMMENDED RATE, AND SHREDDED HARDWOOD MULCH SPREAD AT A MINIMUM OF 3" DEPTH.
14. ALL DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
15. ALL EXISTING TREES OF HIGH QUALITY LOCATED OUTSIDE OF THE CONSTRUCTION ZONE SHALL BE SAVED.
16. CONTRACTOR TO DEEP SPADE EDGE AND MULCH ALL EXISTING LANDSCAPE BEDS AND TREES WITHIN THE PROJECT LIMITS.



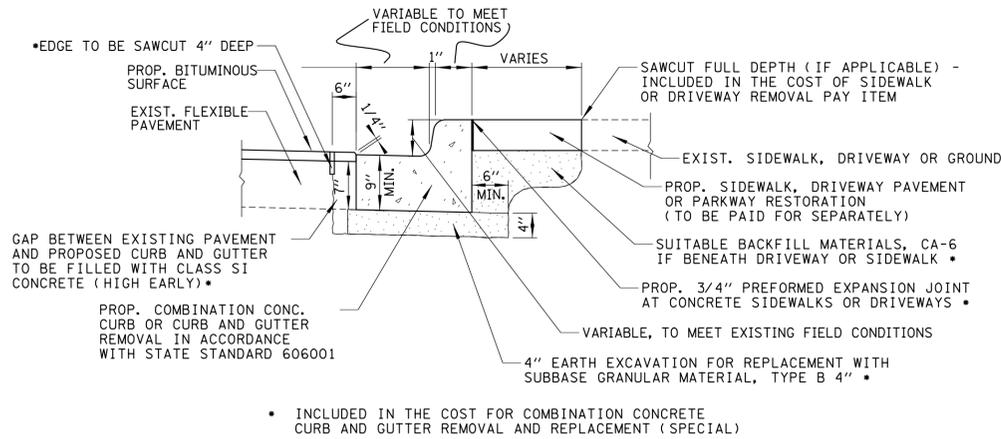
CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CLIENT:
VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
FILE NAME	N:\OakLawn\170048\Civil\LSP-03_170048.SHT			

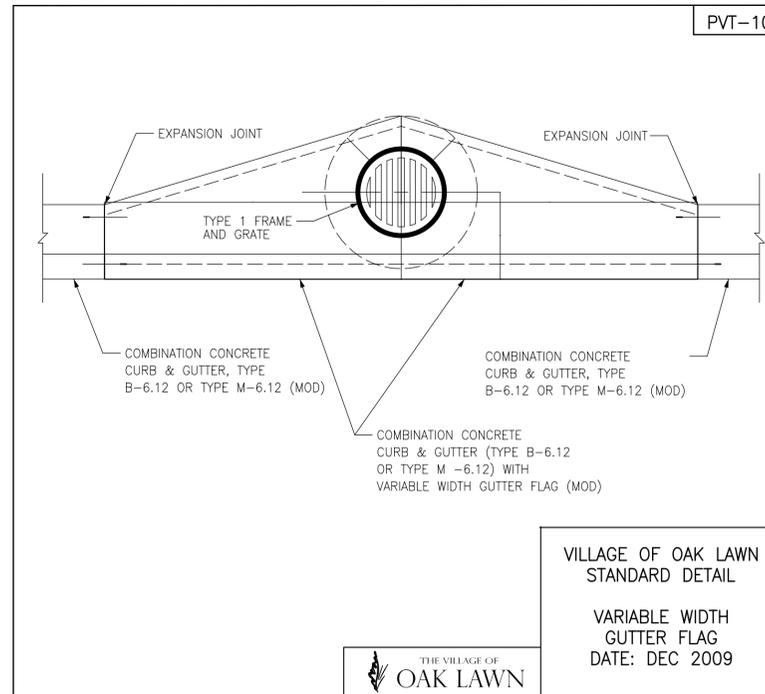
TITLE:
LANDSCAPING AND SE / SC PLAN

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 17 OF 38
 DRAWING NO.
LSP-3



COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (SPECIAL)

NOTE:
LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.



VILLAGE OF OAK LAWN
STANDARD DETAIL

VARIABLE WIDTH
GUTTER FLAG
DATE: DEC 2009



Model # TLSRS3

Dimension Sheet

111 North River Road
North Aurora, IL 60542
Phone: (800) 323-5654
Fax: (630) 897-0573
sales@belsong.com



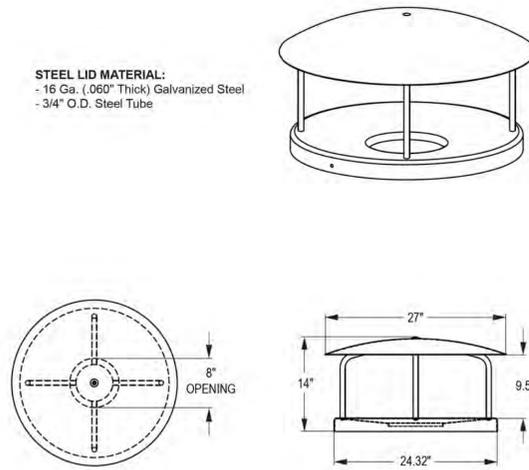
Model # PFT34-D

Dimension Sheet

111 North River Road
North Aurora, IL 60542
Phone: (800) 323-5654
Fax: (630) 897-0573
sales@belsong.com

RAIN SHIELD LID | 34 OR 44 GALLON

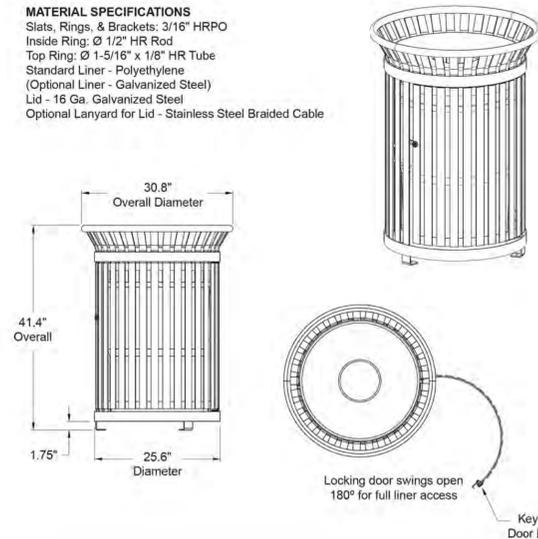
STEEL LID MATERIAL:
- 16 Ga. (.060" Thick) Galvanized Steel
- 3/4" O.D. Steel Tube



www.belsong.com

PREMIER FLARE TOP TRASH RECEPTACLE WITH LOCKING DOOR

MATERIAL SPECIFICATIONS
Slats, Rings, & Brackets: 3/16" HRPO
Inside Ring: Ø 1/2" HR Rod
Top Ring: Ø 1-5/16" x 1/8" HR Tube
Standard Liner - Polyethylene
(Optional Liner - Galvanized Steel)
Lid - 16 Ga. Galvanized Steel
Optional Lanyard for Lid - Stainless Steel Braided Cable



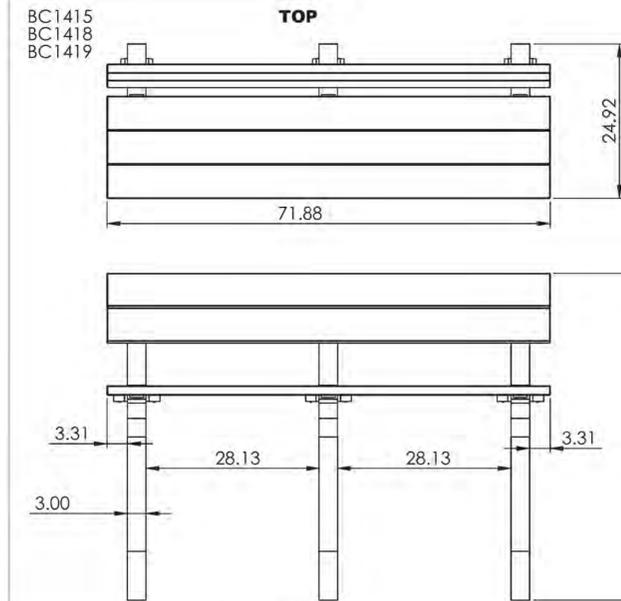
www.belsong.com

TRASH RECEPTACLE AND LID DETAILS

BENCH SPECIFICATIONS

REV# 1
2/14/2017

BC1415
BC1418
BC1419



CONSTRUCTION MATERIALS:
Recycled Plastic
HARDWARE:
Stainless Steel

ALL DIMENSIONS ARE SHOWN IN INCHES

BENCH DETAIL

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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:
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9446 SOUTH RAYMOND AVENUE
OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
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TITLE:

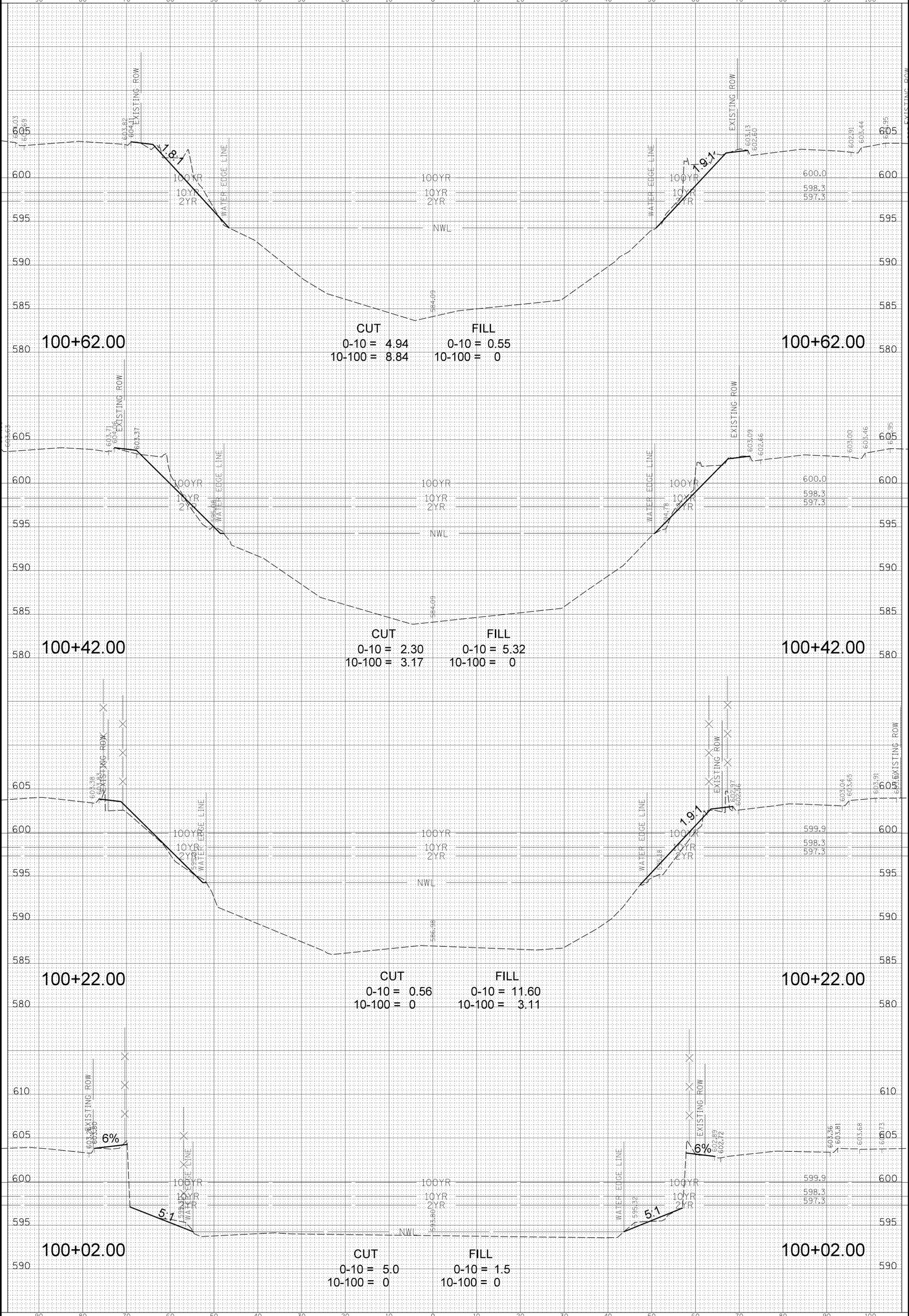
CONSTRUCTION DETAILS

PROJ. NO. 17-0048
DATE: 10/25/2019
SHEET 19 OF 38
DRAWING NO.

DET

NO.	DESCRIPTION	DATE	BY	CHKD.

FILE NAME: N:\OakLawn\170048\Civil\XS_170048.SHT



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 (847) 823-0500

CLIENT:



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 9446 S RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

DSCN.	PMM
DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
CAD USER:	Jlapaglia
MODEL:	Default

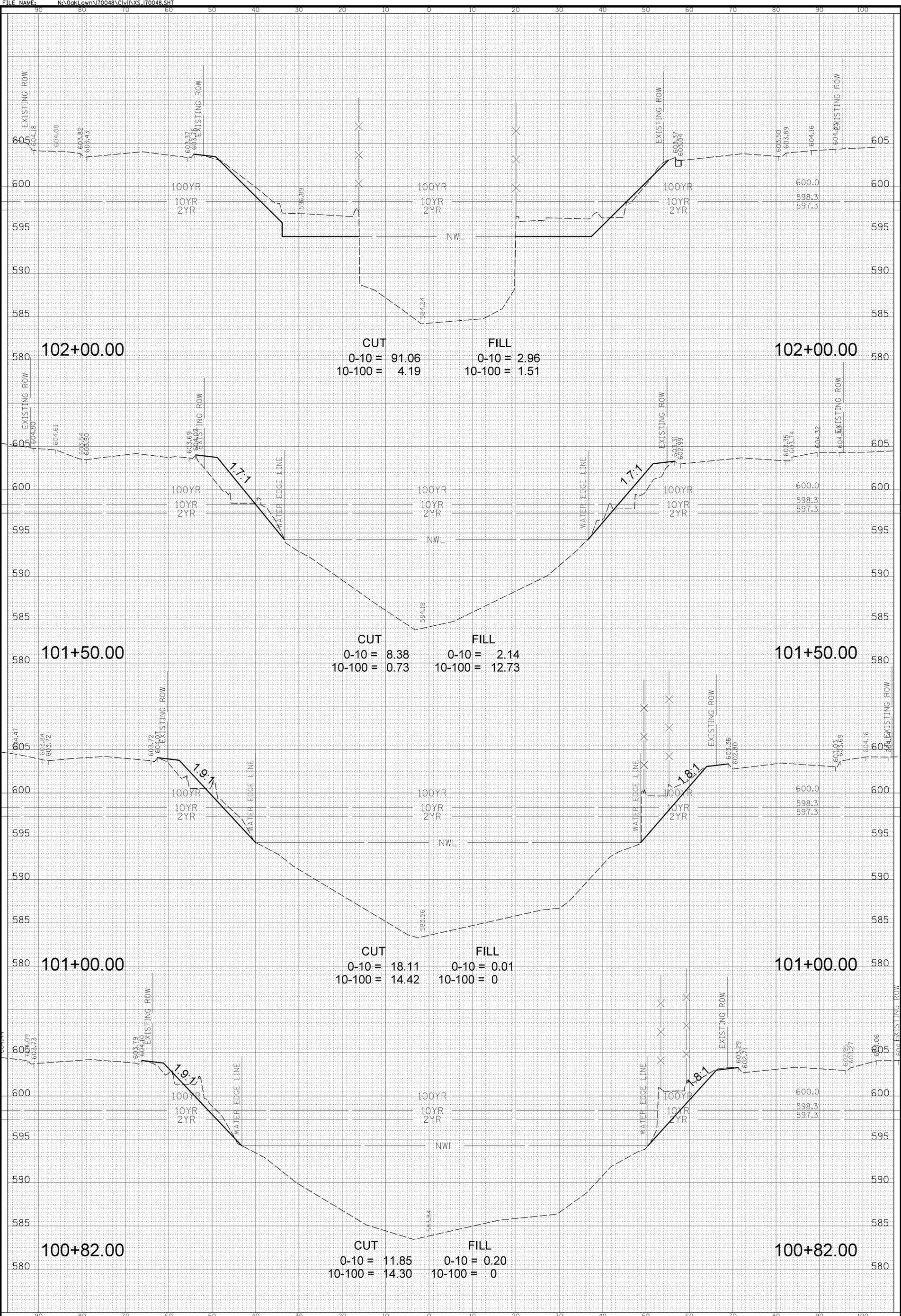
TITLE:

OAK LAWN LAKE
STA. 100 + 02.00 - STA. 100 + 62.00

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 21 OF 38
 DRAWING NO.

XS1

NO.	DESCRIPTION	DATE	BY	CHECKED



CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CLIENT:



VILLAGE OF OAK LAWN
 9446 S RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

DSCN.	PMM
DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
CAD USER:	Jlapaglia
MODEL:	Default

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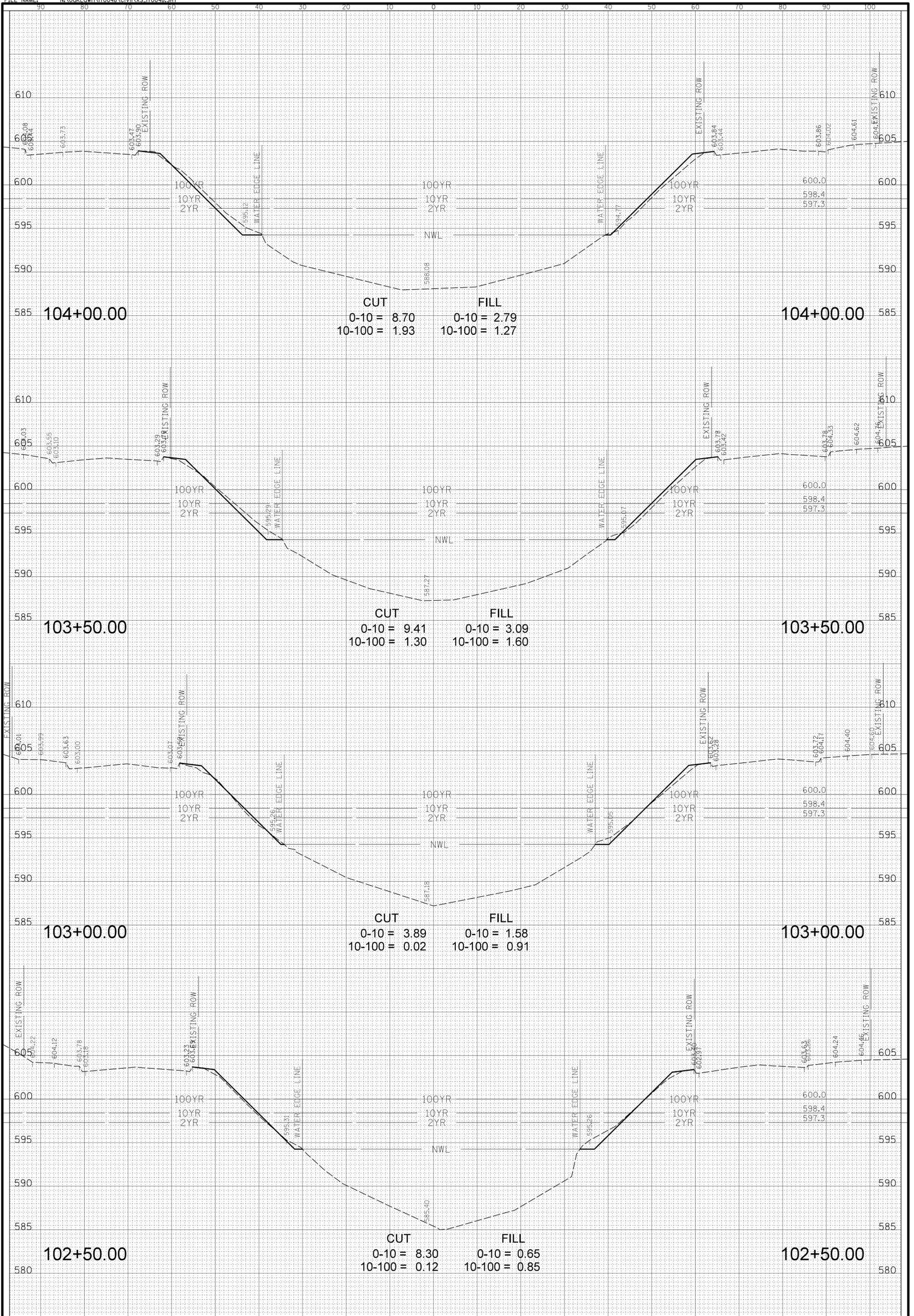
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 STA. 100 + 82.00 - STA. 102 + 00.00

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 22 OF 38
 DRAWING NO.

XS2

NO.	DESCRIPTION	DATE	BY	CHKD.	DESC.

FILE NAME: N:\00k\awn\170048\CIVIL\XS_170048.SHT



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 OAK LAWN, ILLINOIS 60453

DSCN.	PMM
DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
CAD USER:	Jlapaglia
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TITLE:

OAK LAWN LAKE
STA. 102 + 50.00 - STA. 104 + 00.00

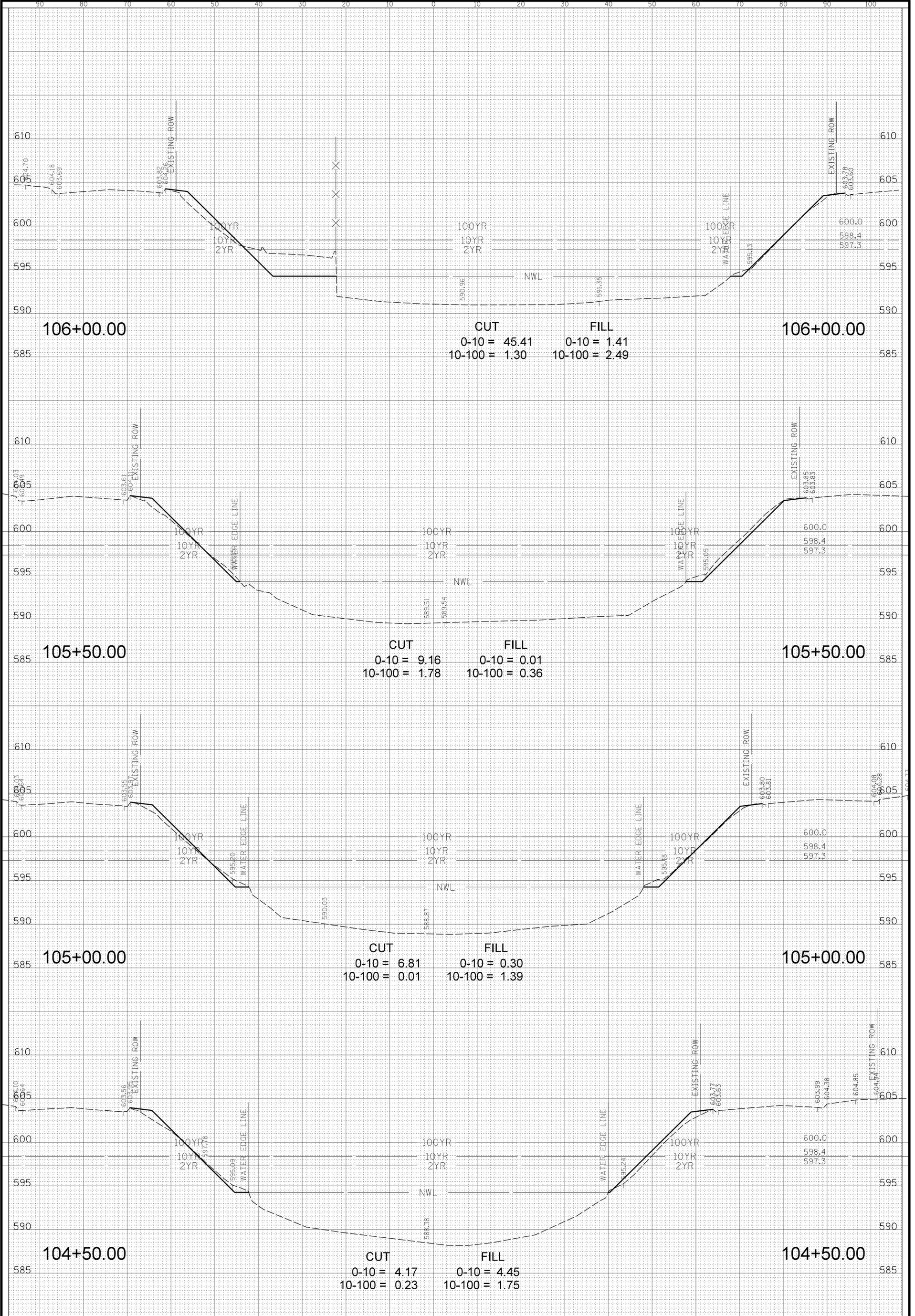
PROJ. NO. 17-0048
DATE: 10/25/2019
SHEET 23 OF 38
DRAWING NO.

XS3

NO.	DESCRIPTION	DATE	BY	CHKD.	DESC.

NO.	DESCRIPTION	DATE	BY	CHKD.	DESC.

FILE NAME: N:\OakLawn\170048\CIVIL\XS_170048.SHT



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DSCN.	PMM
DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
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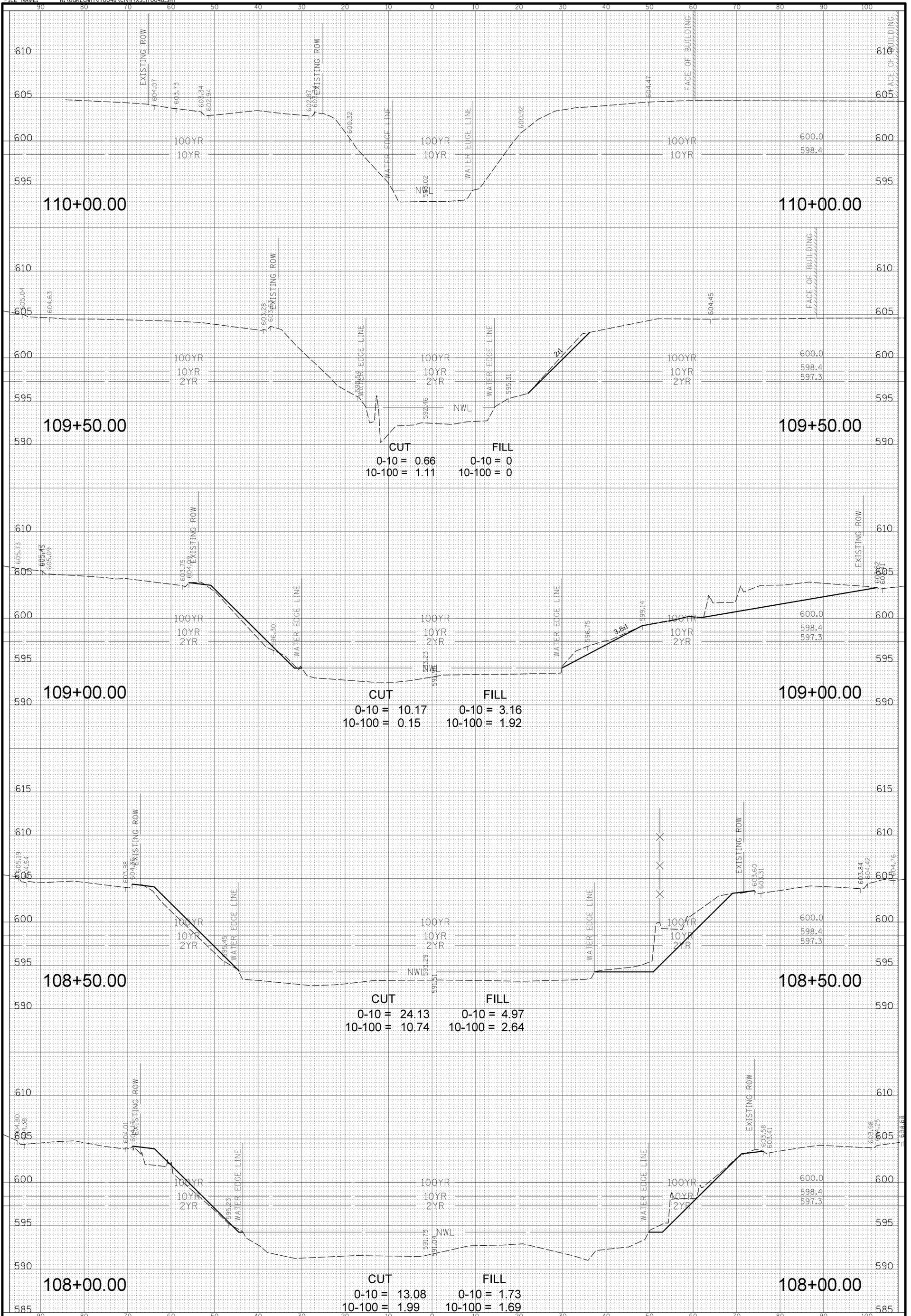
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PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 24 OF 38
 DRAWING NO.

XS4

NO.	DESCRIPTION	DATE	BY	CHKD.

FILE NAME: N:\06klawn\170048\CIVIL\XS_170048.SHT



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DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
CAD USER:	Jlapaglia
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OAK LAWN LAKE
STA. 108 + 00.00 - STA. 110 + 00.00

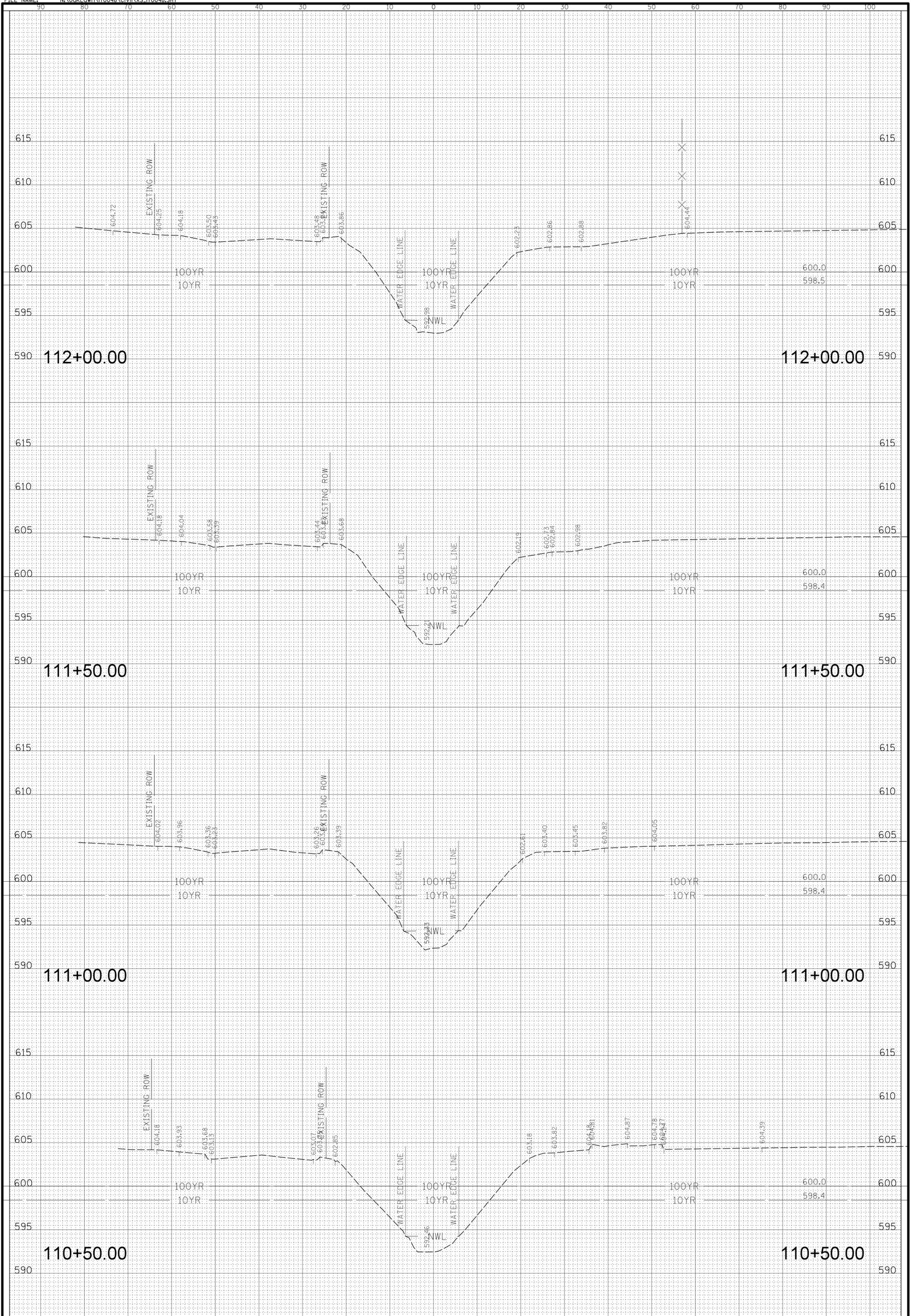
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DATE: 10/25/2019
SHEET 26 OF 38
DRAWING NO.

XS6

NO.	DESCRIPTION	DATE	BY	CHKD.

NO.	DESCRIPTION	DATE	BY	CHKD.

FILE NAME: N:\06k\awn\170048\CIVIL\XS_170048.SHT



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 9446 S RAYMOND AVENUE
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DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
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OAK LAWN LAKE
STA. 110 + 50.00 - STA. 112 + 00.00

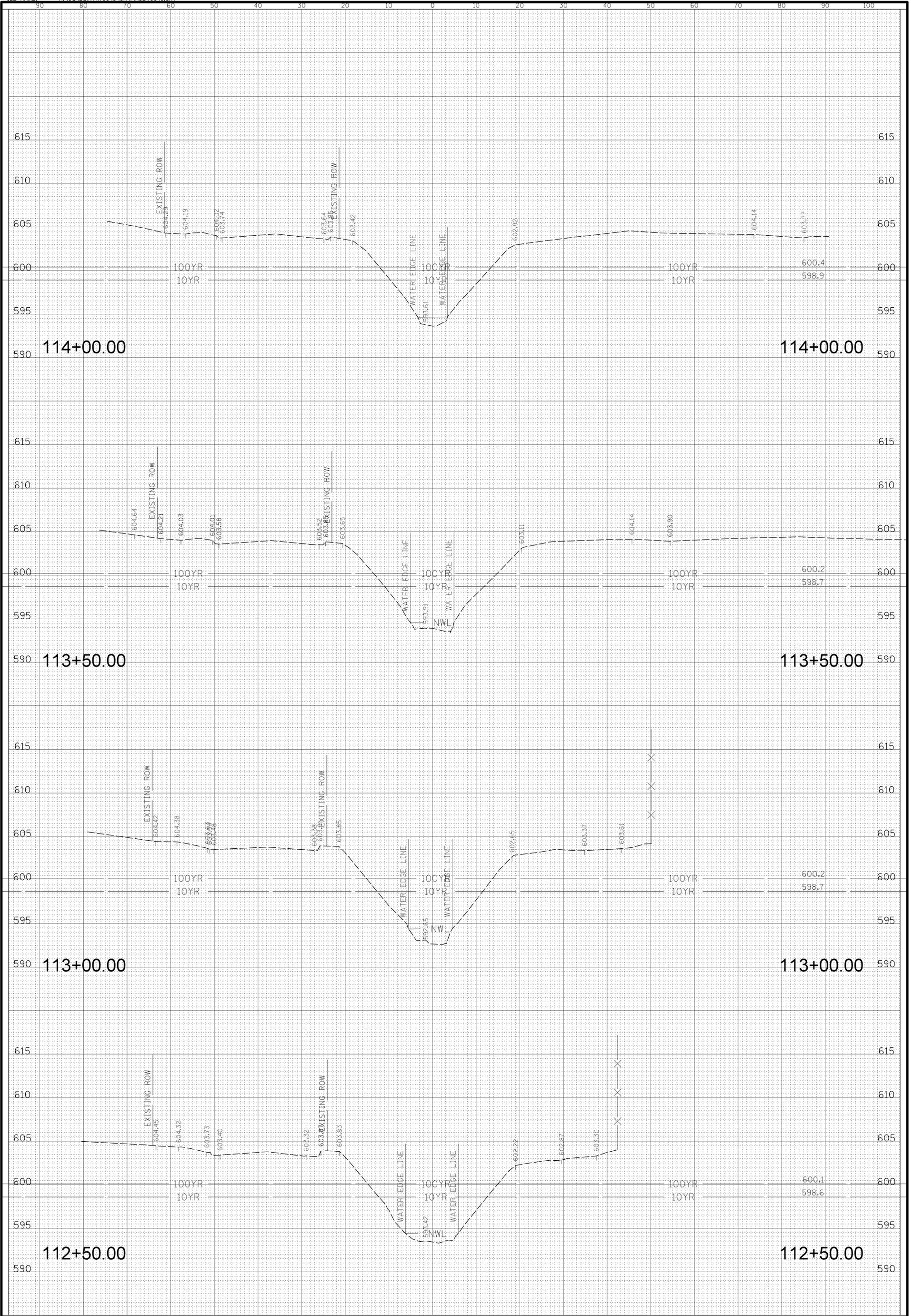
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 DATE: 10/25/2019
 SHEET 27 OF 38
 DRAWING NO.

XS7

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REV	DESCRIPTION	DATE	BY	CHKD

FILE NAME: N:\00k\awn\170048\CIVIL\XS_170048.SHT



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 OAK LAWN, ILLINOIS 60453

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DWN.	PMM
CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
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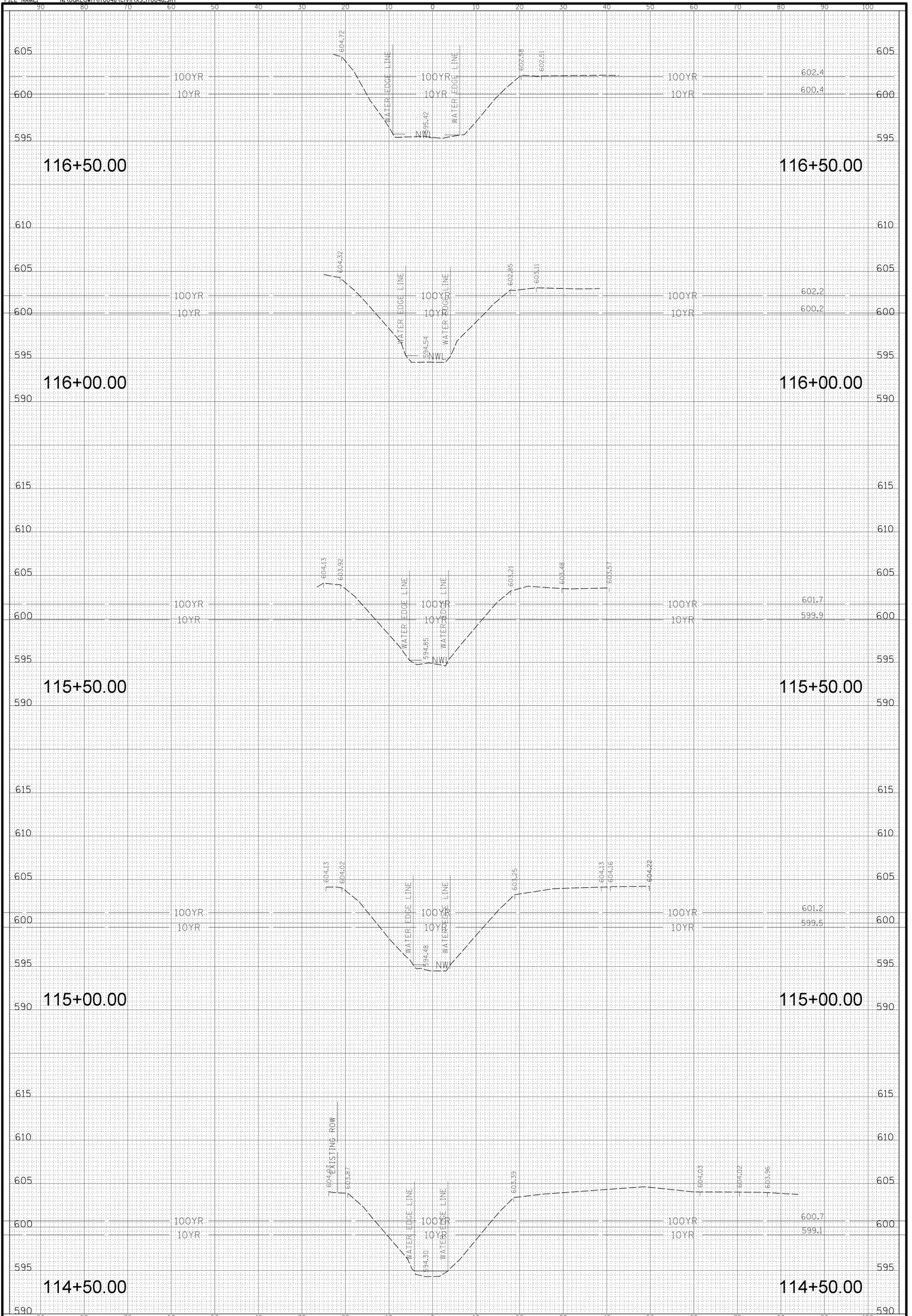
OAK LAWN LAKE
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PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 28 OF 38
 DRAWING NO.

XS8

NO.	DESCRIPTION	DATE	BY	CHKD.	DESC.

FILE NAME: N:\06klawn\170048\CIVIL\XS_170048.SHT



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CHKD.	LMF
SCALE:	HORZ. 10 VERT. 5
PLOT DATE:	10/25/2019
CAD USER:	Jlapaglia
MODEL:	DeFault

TITLE:

OAK LAWN LAKE
 STA. 114 + 50.00 - STA. 116 + 50.00

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 29 OF 38
 DRAWING NO.

XS9

GENERAL NOTES

- THE VILLAGE SHALL BE NOTIFIED IN WRITING AT LEAST (3) FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- UTILITIES EXIST IN THE AREA WHERE WORK IS PROPOSED. ACTUAL DEPTH OF UTILITIES ARE UNKNOWN. SHOULD ANY GIVEN UTILITY INTERFERE WITH THE PROPOSED WORK, PIPE ROUTING, ETC., THE CONTRACTOR SHALL, AT NO EXTRA COST TO THE VILLAGE, RESOLVE ANY AND ALL INTERFERENCE PROBLEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK AS REQUIRED.
- ALL UTILITY COMPANIES SHALL BE CONTACTED AND THEIR FACILITIES SHALL BE LOCATED PRIOR TO ANY WORK IN ANY EASEMENT, RIGHT-OF-WAY, OR SUSPECTED UTILITY LOCATION.
- BEFORE BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LINE AND GRADES SHOWN ON THE CONTRACT DRAWINGS. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY REPORT SAME TO THE VILLAGE PRIOR TO PERFORMING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK AS REQUIRED.
- ALL ELEVATIONS SHOWN ON THE CONTRACT DRAWINGS ARE BASED ON ESTABLISHED DATUM AT EACH SITE UNLESS OTHERWISE SPECIFIED.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
 - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS," AS PREPARED BY IDOT
 - "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS"
 - VILLAGE AND CURRENT MUNICIPAL CODES
 - NATIONAL ELECTRIC CODE

WHERE CONTRADICTIONS OCCUR BETWEEN THE ABOVE LISTED SPECIFICATION, CODES AND/OR CONTRACT DOCUMENTS, THE MORE STRINGENT SHALL APPLY.

GENERAL NOTES CONTINUED...

- ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL OWNER'S REPRESENTATIVE, AND STATE AND LOCAL TIPPING FEE.
- ALL DISTURBED AREAS WHERE RESTORATION IS NOT COVERED BY THE CONTRACT DRAWINGS AND/OR APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
- EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT OR OTHER PIECE OF EQUIPMENT.
- THE INSTALLATION OF BURIED WARNING TAPE, SPECIFIED AS PART OF TRENCH FOR UNDERGROUND CONDUITS, SHALL BE REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING OR PLOWING OPERATIONS, AS APPLICABLE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH COM ED AND THE VILLAGE.
- THE CONTRACTOR SHALL LABEL ALL WIRES WITH WIRE MARKERS INDICATING THE CIRCUIT ID IN EVERY CONTROLLER, POLE BASE, HAND HOLE AND SPLICE/CONNECTION POINT. WIRE MARKERS SHALL BE MECHANICALLY FASTENED WHITE PLASTIC, TYPE "PLM" AS MANUFACTURED BY PANDUIT OR APPROVED EQUAL.
- ALL UNDERGROUND WIRING SHALL BE MINIMUM #10 COPPER (OR SIZE AS SHOWN ON THE PLANS) XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, INSTALLED IN CONDUIT A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
- LUMINAIRES SHALL BE LEVEL AND HAVE A TIGHT FIT TO THE VILLAGE'S SATISFACTION. THIS WORK SHALL INCLUDE FIELD ADJUSTING OF THE LUMINAIRE WHICH WILL BE INCIDENTAL TO THE COST OF THE CONTRACT.
- ALL HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
- THE LIGHT LOCATIONS SHALL COMPLY WITH THE MINIMUM CLEAR WIDTH FOR AN ACCESSIBLE ROUTE FOR SIDEWALKS PER CURRENT AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHTS FOR EXAMINATION BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO MARKING LOCATIONS. THE EXACT LOCATIONS OF ALL PROPOSED ITEMS SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO FULL SIZE SETS OF RECORD DRAWINGS TO THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATION OF ALL LIGHTS, UNDERGROUND CONDUIT & WIRING, HANDHOLES, CONTROLS & PANELBOARDS/POWER SUPPLY.
- UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS. ALL ELECTRICAL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND THE VILLAGE.
- THE CONTRACTOR SHALL PROVIDE A GUARANTEE FOR ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR AFTER THE DATE OF ACCEPTANCE.
- CONDUIT MUST BE POSITIONED TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE.
- ALL CONDUITS SHALL BE INSTALLED BY DIRECTIONAL BORING METHOD. SOME LOCATIONS MAY REQUIRE TRENCHING AND/OR HAND DIGGING. CONTRACTOR SHALL PROVIDE PRIOR NOTICE TO ENGINEER BEFORE TRENCHING.
- POTHOLING AND BACKFILLING FOR UTILITIES SHALL BE INCLUDED IN THE ITEM THAT IS BEING INSTALLED, EXCEPT REMOVAL AND REPLACEMENT OF SIDEWALK AND PAVEMENT WILL BE PAID FOR SEPARATELY.

SHOP DRAWING REVIEW NOTES

- THE CONTRACTOR SHALL SUBMIT FOR REVIEW DIMENSIONED OUTLINE SHOP DRAWINGS SHOWING THE GENERAL ARRANGEMENT OF THE EQUIPMENT TO BE FURNISHED, AND ITEMS TO BE INSTALLED. AS A MINIMUM FOUR COPIES OF ALL SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW.
- BEFORE PROCEEDING WITH MANUFACTURE OF THE EQUIPMENT, THE CONTRACTOR SHALL SUBMIT FOR REVIEW GENERAL ASSEMBLY SHOP DRAWINGS, SUBASSEMBLY SHOP DRAWINGS, DETAIL SHOP DRAWINGS, CALCULATIONS, DESIGN DATA, CATALOG CUTS AND SIMILAR ENGINEERING DOCUMENTS REQUIRED TO DEMONSTRATE FULLY THAT ALL PARTS WILL CONFORM TO THE PROVISIONS AND INTENT OF THE DRAWINGS AND SPECIFICATIONS AND TO THE REQUIREMENTS OF THEIR INSTALLATION, OPERATION, AND MAINTENANCE. THESE SHOP DRAWINGS SHALL SHOW ALL NECESSARY DIMENSIONS AND FABRICATION DETAILS, INCLUDING THE DESIGN OF WELDED AND BOLTED JOINT CONNECTIONS, TOLERANCES ON FITS AND CLEARANCES, AND ALL FIELD JOINTS AND SUBASSEMBLIES IN WHICH THE CONTRACTOR PROPOSES TO SHIP THE EQUIPMENT. DESIGN CRITERIA, CALCULATIONS, AND DETAILED SPECIFICATIONS SHALL BE SUBMITTED FOR THE DESIGN OF ALL COMPONENTS AND FOR OTHER FEATURES OR DETAILS WHEN REQUESTED BY THE VILLAGE.
- ALL SUBMITTALS BY THE CONTRACTOR SHALL BE CERTIFIED BY THE RESPECTIVE EQUIPMENT MANUFACTURER.
- THE CONTRACTOR SHALL SUBMIT COMPLETE FULL-LINE WIRING DIAGRAMS COVERING ALL EQUIPMENT FURNISHED. THE CONTRACTOR SHALL FURNISH SHOP DRAWINGS OF SWITCH DEVELOPMENTS FOR ALL INSTRUMENT AND CONTROL SWITCHES AND INTERNAL CONNECTION DIAGRAMS FOR ALL INSTRUMENTS, RELAYS, REGULATORS, ETC.
- SHOP DRAWINGS SHALL INCLUDE ELECTRICAL DEVICES, ACCESSORIES AND WIRING FURNISHED AS COMPONENT PARTS OF MECHANICAL EQUIPMENT AND SHALL SHOW ARRANGEMENT AND DIMENSIONS.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL WORK AREAS, INDICATING SOLUTIONS TO SPACE PROBLEMS AND COORDINATION WITH REQUIREMENTS OF EXISTING CONDITIONS.
- PRIOR TO FINAL INSPECTION THE CONTRACTOR SHALL PROVIDE THREE DUPLICATE LOOSE LEAF THREE RING BOUND COPIES AND ONE PDF COPY OF OPERATIONS AND MAINTENANCE MANUALS IN DURABLE COVERS OF THE FOLLOWING ITEMS ORGANIZED AND TAB INDEXED IN ACCORDANCE WITH THE SPECIFICATIONS FORMAT AS FOLLOWS:
 - MAINTENANCE AND OPERATING INSTRUCTIONS AS PUBLISHED BY THE MATERIAL SUPPLIERS AND/OR EQUIPMENT MANUFACTURERS.
 - SPECIFIED EQUIPMENT GUARANTEES AND WARRANTIES.
 - EMERGENCY INSTRUCTIONS.
 - WIRING DIAGRAMS.
 - SHOP DRAWINGS AND PRODUCT DATA.
 - INSPECTION PROCEDURES AND SERVICE RECOMMENDATIONS.
 - ASSEMBLY DRAWINGS AND PARTS LISTS WITH IDENTIFICATION SYMBOLS OR PART NUMBERS FOR ALL REPLACEABLE PARTS AND ASSEMBLIES.
 - TEST REPORTS.

THIS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

EXCAVATION AND BACKFILL NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO READ AND UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.
- THE CONTRACTOR SHALL EXAMINE THE CONTRACT DRAWINGS THOROUGHLY PRIOR TO BEGINNING ANY EXCAVATION, AND SHALL NOTIFY THE VILLAGE'S REPRESENTATIVE IMMEDIATELY OF ANY DISCREPANCIES.
- ALL WORK AREAS SHALL BE PROPERLY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, TRAFFIC, AND FROST.
- THE EXCAVATION FOR STRUCTURE AND/OR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING STRUCTURE/PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY EXCAVATIONS/TRENCHES SHALL BE PROVIDED BY THE CONTRACTOR AND THE COST OF SUCH SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS TO WHICH THEY PERTAIN.
- DETAILED DRAWINGS FOR ANY SHEETING AND BRACING SHALL BE PROVIDED FOR REVIEW TO THE VILLAGE'S REPRESENTATIVE PRIOR TO IMPLEMENTATION OF THE METHOD. A TRENCH BOX SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES, AND BE UTILIZED IN ACCORDANCE WITH OSHA STANDARDS.
- SUITABLE EXCAVATED MATERIALS SUBJECT TO THE REVIEW OF THE VILLAGE'S REPRESENTATIVE MAY BE USED TO BACKFILL THE EXCAVATED AREAS OF THE SITE UNLESS SHOWN OTHERWISE.
- NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN INSPECTED BY THE VILLAGE OR ENGINEER.
- TRENCH BACKFILL SHALL BE PROVIDED FOR THE FULL DEPTH ABOVE PIPELINES UNDER PROPOSED OR EXISTING PAVEMENTS, UTILITIES, DRIVEWAYS, AND SIDEWALKS. THE TRENCH BACKFILL SHALL CONSIST OF A GRANULAR MATERIAL MEETING IDOT CRUSHED STONE CA-6 GRADATION SPECIFICATIONS. THE TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS AND SHALL EXTEND A MINIMUM OF TWO FEET ON EITHER SIDE OF THE PIPE CENTERLINE, OR AS OTHERWISE SHOWN OR SPECIFIED HEREIN.
- BACKFILL IN PIPE TRENCHES IN OPEN AREAS AND LANDSCAPED AREAS SHALL CONSIST OF CA-7 FOR BEDDING, HAUNCHING, AND INITIAL BACKFILL; THEN SUITABLE EXCAVATED MATERIALS PLACED IN LIFTS AND COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY OBTAINABLE PER ASTM D 1557 FOR FINAL BACKFILL.
- THE CONTRACTOR SHALL REMOVE ALL EXCESS UTILITY SPOIL. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- NO EXCAVATIONS SHALL BE LEFT OPEN OVERNIGHT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COVER OPEN EXCAVATIONS WITH STEEL SHEET PLATES. THE COST OF THIS PROCEDURE SHALL BE INCIDENTAL TO THE WORK IN WHICH IT PERTAINS.

RECORD DRAWINGS & UTILITY NOTES

- CERTAIN INFORMATION SHOWN ON THESE DRAWINGS HAS BEEN OBTAINED FROM DRAWINGS OF RECORD. CONTRACTOR SHALL VERIFY SUCH INFORMATION PRIOR TO ACTUAL START OF WORK. WHERE DISCREPANCIES ARE DISCOVERED THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE VILLAGE'S REPRESENTATIVE. FAILURE BY THE CONTRACTOR TO IMMEDIATELY NOTIFY THE VILLAGE'S REPRESENTATIVE OF SUCH DISCREPANCIES SHALL RESULT IN THE CONTRACTOR BEARING THE FULL BURDEN OF ALL RISKS/COSTS ATTRIBUTED TO THE DISCOVERED DISCREPANCY.
- EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE DRAWINGS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS.
- THE EXISTING BURIED UTILITY LINES, PUBLIC AND PRIVATE, ARE SHOWN ON THE DRAWINGS ACCORDING TO INFORMATION AVAILABLE FROM RECORDS. THE LOCATION AND DEPTH OF EXISTING BURIED UTILITY LINES SHOWN ON THE DRAWINGS IS THEREFORE APPROXIMATE AND MAY VARY FROM FIELD CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND DEPTH OF BURIED UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES TO MARK THE LOCATION OF BURIED UTILITIES IN THE FIELD BEFORE BEGINNING EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES AND SHALL REPAIR ANY UTILITY LINES DAMAGED AT HIS/HER OWN EXPENSE.
- BEFORE INSTALLING ANY BURIED PIPE, THE CONTRACTOR SHALL CAREFULLY UNCOVER ALL EXISTING BURIED UTILITY LINES WHICH CROSS NEW CONSTRUCTION SO HE/SHE CAN DETERMINE THEIR EXACT LOCATION AND DEPTH. IF EXISTING BURIED UTILITY LINES ARE ENCOUNTERED THAT CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE VILLAGE'S REPRESENTATIVE SO THAT THE CONFLICT MAY BE RESOLVED.

SUBSURFACE OPERATION PLAN

- BEFORE COMMENCING ACTIVITY AT THE SITE THE CONTRACTOR SHALL PREPARE AN "OPERATION PLAN" DRAWING SHOWING THE SEQUENCE OF OPERATION AND TIMING THAT IS PROPOSED FOR THE SUBSURFACE WORK. THIS PLAN DRAWING SHALL BE EXCLUSIVE OF ALL OTHER PLANS AND SCHEDULES REQUIRED UNDER THE CONTRACT. THE PLAN SHALL SHOW IN PLAN AND PROFILE SUPPLEMENTED BY SKETCHES, TEXT AND BAR DIAGRAMS THE EXTENT AND SEQUENCE OF WORK REQUIRED FOR THE SUBSURFACE CONSTRUCTION. THE PLAN SHALL SHOW ALL EXCAVATION, SHEETING, PROTECTION, DEWATERING PROCEDURES, BYPASS PUMPING, UTILITIES SUPPORT, DRAINS AND ALL OTHER FEATURES REQUIRED TO PERFORM THE SUBSURFACE OPERATION. THE PLAN SHALL BE SUBMITTED TO THE VILLAGE'S REPRESENTATIVE FOR REVIEW. INSO FAR AS POSSIBLE ALL INFORMATION SHALL BE SHOWN ON THE PLAN FOR CONVENIENCE OF INTERPRETATION UNDER FIELD CONDITIONS. THE PLAN SHALL BE SEALED BY AN ILLINOIS REGISTERED STRUCTURAL ENGINEER.
- ALL SHEETING/SHORING AND EARTH RETENTION/PROTECTION OF THE EXCAVATIONS AROUND THE PROJECT WORK SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

FINAL ACCEPTANCE AND INSPECTION

- WHEN ALL THE WORK AS SHOWN ON THE DRAWINGS AND INCLUDED IN THE SPECIFICATIONS HAS BEEN COMPLETED AND THE EQUIPMENT HAS BEEN INSTALLED, TESTED, PLACED INTO OPERATION, AND SUBSEQUENTLY HAS SATISFACTORILY OPERATED FOR 7 DAYS, A THOROUGH INSPECTION OF THE EQUIPMENT WILL BE MADE BY THE VILLAGE IN THE COMPANY OF THE CONTRACTOR, AND IF THE WORK IS FOUND TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS, THE WORK WILL BE FORMALLY ACCEPTED AND THE CONTRACTOR SO NOTIFIED AS TO THE FINAL ACCEPTANCE OF THE WORK BY THE VILLAGE. NOTIFICATION OF FINAL ACCEPTANCE WILL BE MADE IN WRITING.
- SHOULD ANY WORK BE FOUND TO BE INADEQUATE, FAULTY, OR OTHERWISE NOT IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT SUCH WORK AT HIS/ HER OWN EXPENSE, PRIOR TO FINAL ACCEPTANCE.
- UPON RECEIVING FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A GUARANTEE FOR ALL MATERIAL AND WORKMANSHIP FOR ONE YEAR AFTER THE DATE OF ACCEPTANCE.
- CONTRACTOR SHALL TEST EACH COMPRESSOR IN PLACE TO VERIFY PERFORMANCE WITH SPECIFIED CAPACITY.
- AERATION SYSTEM SUPPLIER/INSTALLER SHALL PROVIDE THE FOLLOWING:
 - INITIAL START UP, TESTING, AND COMMISSIONING SERVICES.
 - STAFF TRAINING, INCLUDING STEP-BY-STEP MANUAL FOR SYSTEM OPERATION AND PROGRAMMING.
 - SPRING 2018 START UP SERVICES.
 - SIX MONTHS MAINTENANCE SERVICES FOR 2018.
 - WINTER 2018 SHUTDOWN SERVICES.
 - FIVE YEAR WARRANTY ON LABOR AND MATERIALS.



CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CLIENT:



VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

				DSGN.	DRK
				DWN.	DRK
				CHKD.	GAH
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TITLE:

**MECHANICAL AND ELECTRICAL
 GENERAL NOTES**

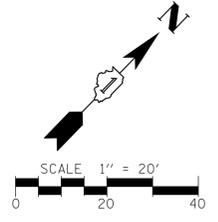
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DATE:	10/25/2019
SHEET	30 OF 38
DRAWING NO.	ELEC-01

REMOVAL LEGEND

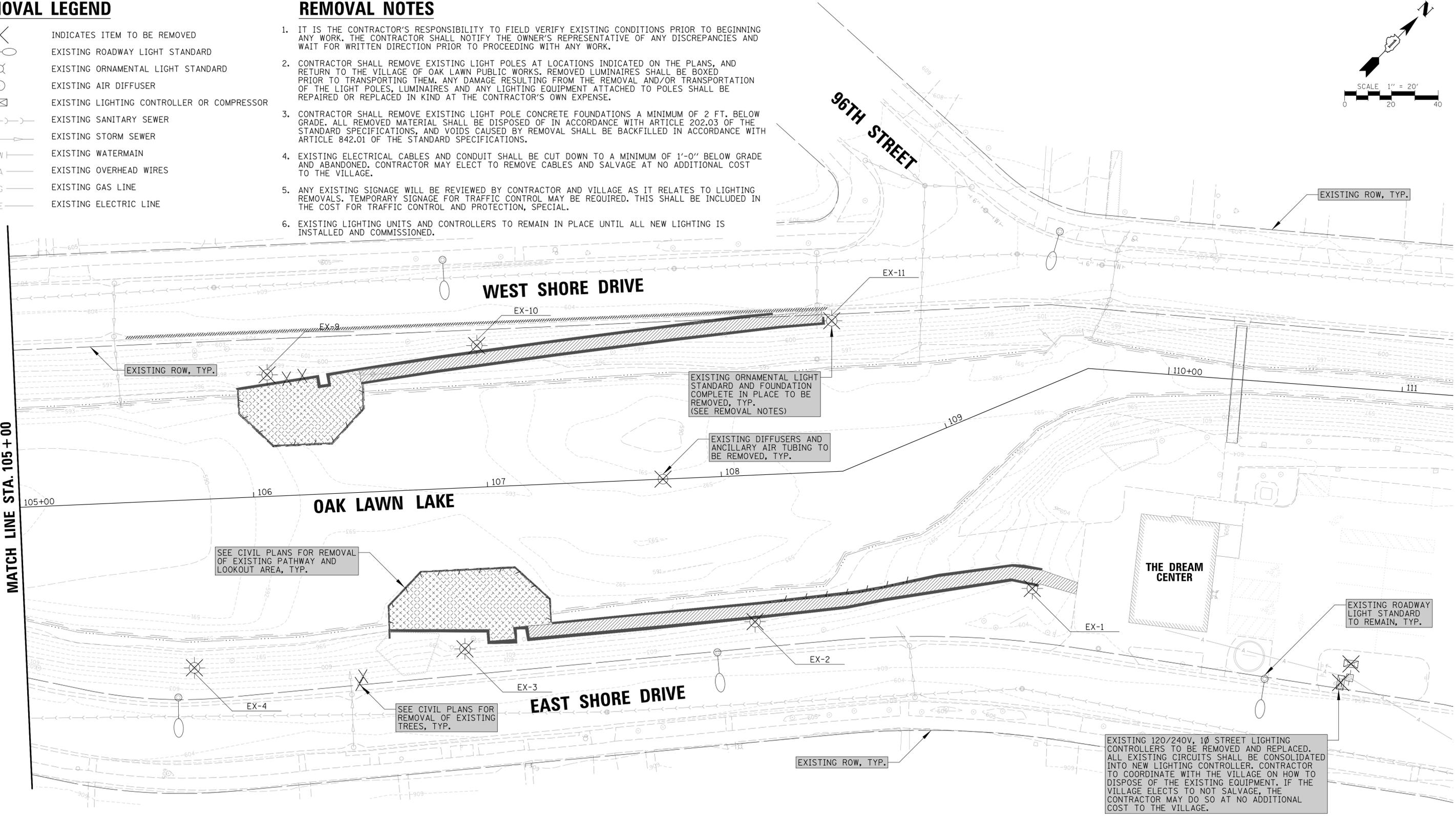
-  INDICATES ITEM TO BE REMOVED
-  EXISTING ROADWAY LIGHT STANDARD
-  EXISTING ORNAMENTAL LIGHT STANDARD
-  EXISTING AIR DIFFUSER
-  EXISTING LIGHTING CONTROLLER OR COMPRESSOR
-  EXISTING SANITARY SEWER
-  EXISTING STORM SEWER
-  EXISTING WATERMAIN
-  EXISTING OVERHEAD WIRES
-  EXISTING GAS LINE
-  EXISTING ELECTRIC LINE

REMOVAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES AND WAIT FOR WRITTEN DIRECTION PRIOR TO PROCEEDING WITH ANY WORK.
2. CONTRACTOR SHALL REMOVE EXISTING LIGHT POLES AT LOCATIONS INDICATED ON THE PLANS, AND RETURN TO THE VILLAGE OF OAK LAWN PUBLIC WORKS. REMOVED LUMINAIRES SHALL BE BOXED PRIOR TO TRANSPORTING THEM. ANY DAMAGE RESULTING FROM THE REMOVAL AND/OR TRANSPORTATION OF THE LIGHT POLES, LUMINAIRES AND ANY LIGHTING EQUIPMENT ATTACHED TO POLES SHALL BE REPAIRED OR REPLACED IN KIND AT THE CONTRACTOR'S OWN EXPENSE.
3. CONTRACTOR SHALL REMOVE EXISTING LIGHT POLE CONCRETE FOUNDATIONS A MINIMUM OF 2 FT. BELOW GRADE. ALL REMOVED MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS, AND VOIDS CAUSED BY REMOVAL SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 842.01 OF THE STANDARD SPECIFICATIONS.
4. EXISTING ELECTRICAL CABLES AND CONDUIT SHALL BE CUT DOWN TO A MINIMUM OF 1'-0" BELOW GRADE AND ABANDONED. CONTRACTOR MAY ELECT TO REMOVE CABLES AND SALVAGE AT NO ADDITIONAL COST TO THE VILLAGE.
5. ANY EXISTING SIGNAGE WILL BE REVIEWED BY CONTRACTOR AND VILLAGE AS IT RELATES TO LIGHTING REMOVALS. TEMPORARY SIGNAGE FOR TRAFFIC CONTROL MAY BE REQUIRED. THIS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION, SPECIAL.
6. EXISTING LIGHTING UNITS AND CONTROLLERS TO REMAIN IN PLACE UNTIL ALL NEW LIGHTING IS INSTALLED AND COMMISSIONED.



MATCH LINE STA. 105 + 00



CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

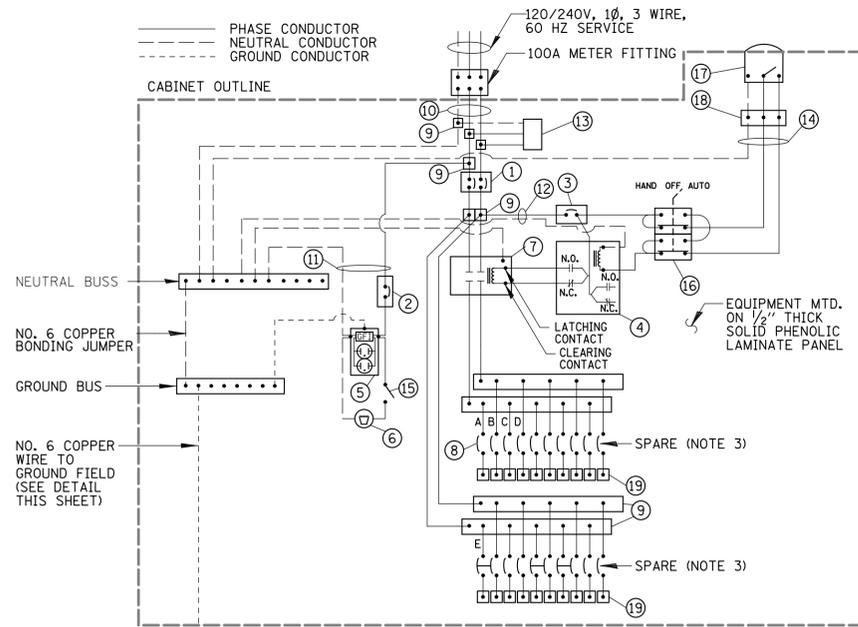
CLIENT:

VILLAGE OF OAK LAWN
 9446 SOUTH RAYMOND AVENUE
 OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
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TITLE:
**MECHANICAL AND ELECTRICAL
 REMOVAL PLAN (2 OF 2)**

PROJ. NO. 17-0048
 DATE: 10/25/2019
 SHEET 33 OF 38
 DRAWING NO.
ELEC-04



NOTES:

1. ALL GROUND CONDUCTORS SHALL BE GREEN AND NEUTRAL CONDUCTORS SHALL BE WHITE. PHASE CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH SECTION 1066.02 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL ONLY USE SOLID COLOR CODED INSULATIONS. COLOR STRIPPING OF PHASE CONDUCTORS SHALL NOT BE ALLOWED.
2. IN ADDITION TO THE TERMINATIONS SHOWN, THE NEUTRAL AND GROUND BUS BARS SHALL EACH ACCOMMODATE A MINIMUM OF 8 ADDITIONAL TERMINATIONS (*#2-#14).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE VILLAGE OF OAK LAWN TO REMOVE AND RELOCATE THE EXISTING LIGHTING CONTROLLERS BRANCH CIRCUITS INTO THE PROPOSED 120/240V 1Ø LIGHTING CONTROLLER.

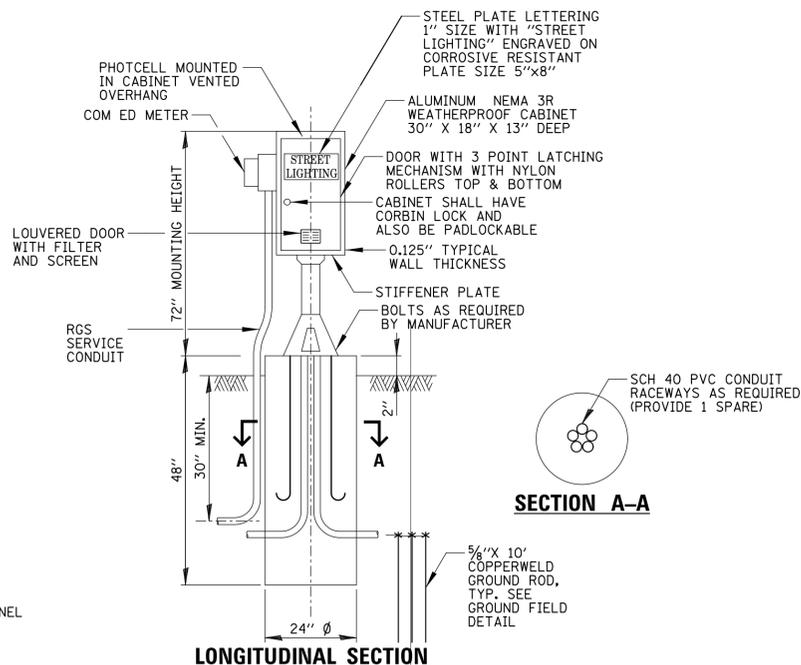
LIGHTING CONTROLLER WIRING DETAIL

ITEM	SPECIFICATION
① MAIN CIRCUIT BREAKER	100 AMPERE, 2P, 240V SERVICE RATING, 10KAIC
② LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 10KAIC
③ PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC
④ AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS
⑤ CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER
⑥ CABINET LIGHT	5 WATT LED STRIP LIGHT, 60K HOUR RATING, 65K COLOR TEMPERATURE, DOOR SWITCH CONTROLLED, FASTENED TO TOP OF CABINET
⑦ CONTACTOR	100 AMPERE, 2P, 120V COIL, MECHANICALLY HELD
⑧ BRANCH LINE CIRCUIT BREAKERS	20A-1P, 120V RATING, AND 2P, 240V RATING, 10KAIC
⑨ POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQ'D, 10KAIC
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. #2
⑪ LAMPHOLDER WIRE	2-600V XLP NO. 12
⑫ CONTROL WIRE	2-600V XLP NO. 12
⑬ SURGE ARRESTOR	10K AMPERE RATING
⑭ PHOTOELECTRIC CONTROL WIRE	3-600V XLP NO. 12
⑮ DOOR SWITCH	20A/120V, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH
⑯ HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN CAST ALUM. ENCLOSURE
⑰ PHOTOCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC
⑱ TERMINAL BLOCK	3 TERMINAL, SCREW TYPE, MAX. #10 WIRE SIZE
⑲ CIRCUIT BREAKER DIST. BLOCKS	30A, 600V, 10 KAIC - WIRE RANGE: LINE SIDE LUG (1) #2/0-#14 AWG, LOAD SIDE LUGS (2) #4-#14 AWG

NOTES:

1. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
2. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."
3. THE MAIN CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT".
4. ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
5. THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.
6. IN ADDITION TO REQUIRED LABELING, THIS CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT", INSTALL RED WARNING PLATE NEXT TO MAIN BREAKER INDICATING "CAUTION - LIVE CIRCUITS EVEN WHEN MAIN CIRCUIT BREAKER IS IN THE OFF POSITION".
7. ALL EXPOSED BUS BARS SHALL BE INSULATED.
8. ALL WIRING SHALL BE COPPER.

LIGHTING CONTROLLER CABINET SCHEDULE

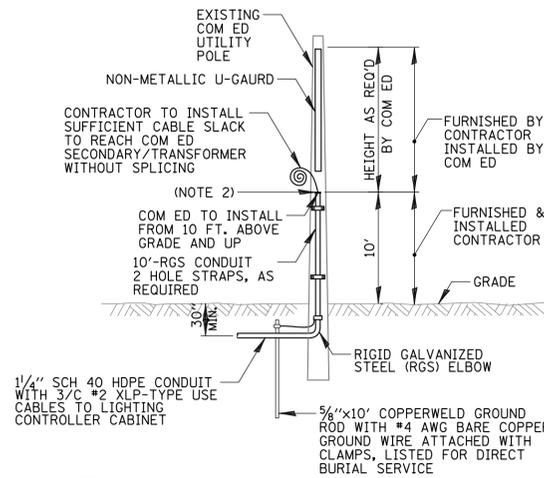


NOTES:

1. SEE LIGHTING CONTROLLER COMPONENT SCHEDULE FOR INTERNAL COMPONENTS.

LIGHTING CONTROLLER CABINET AND FOUNDATION

N.T.S.

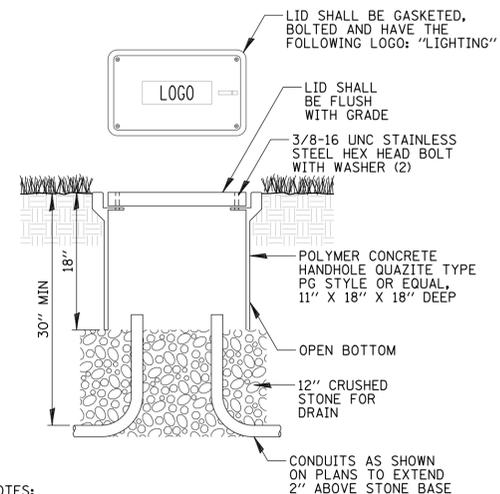


NOTES:

1. ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
2. CONTRACTOR SHALL PROVIDE CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.

COM ED OVERHEAD CONNECTION POLE

N.T.S.

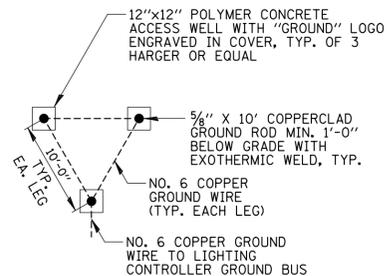


NOTES:

1. NO SPLICING SHALL BE ALLOWED IN HANDHOLES.
2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GRAY.
3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

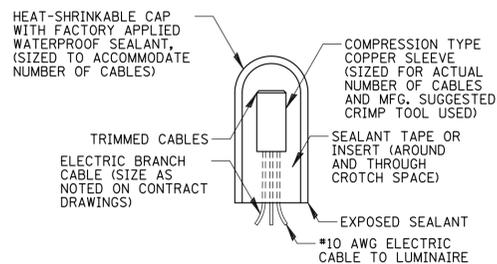
COMPOSITE CONCRETE HANDHOLE

N.T.S.



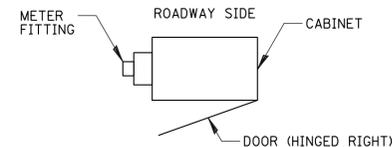
GROUND FIELD DETAIL

N.T.S.



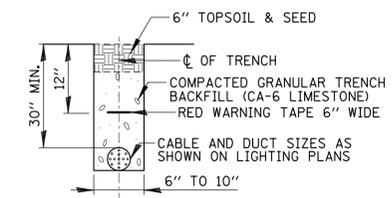
SPlicing ELECTRIC CABLE

N.T.S.



CABINET METER FITTING AND DOOR ORIENTATION

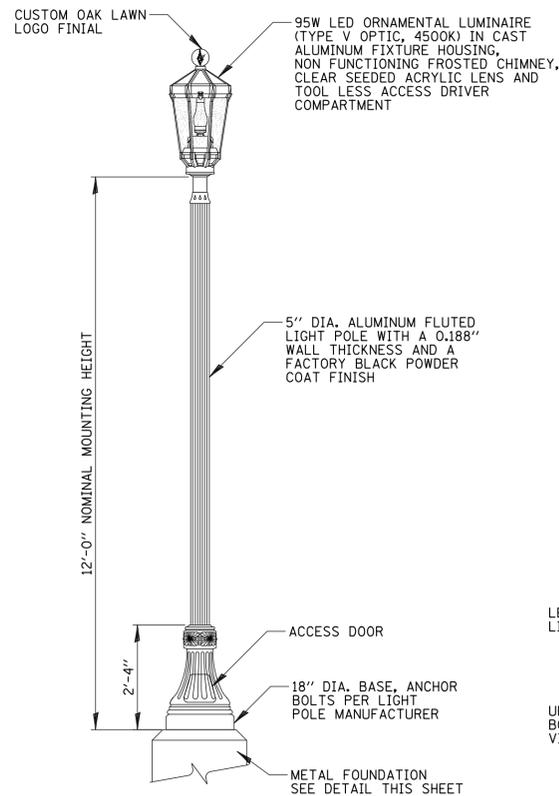
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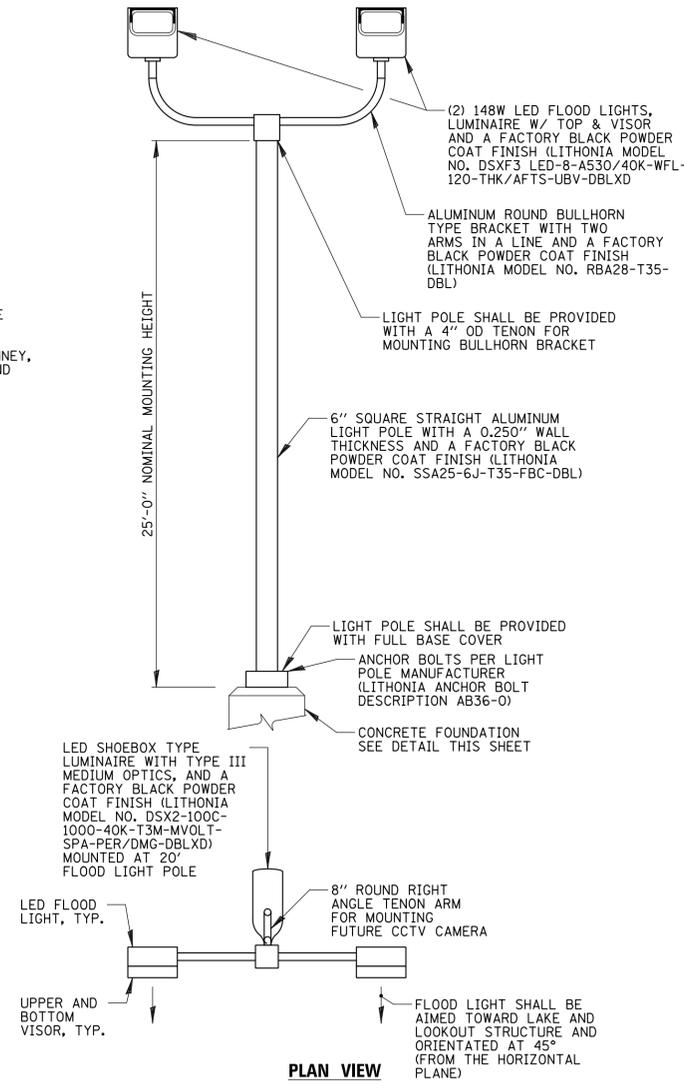
ELECTRIC CONDUIT INSTALLATION

N.T.S.

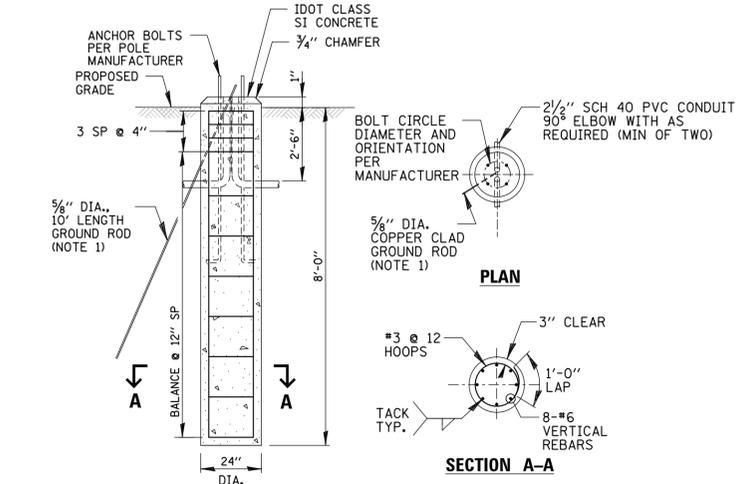
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ORNAMENTAL LIGHT POLE DETAIL
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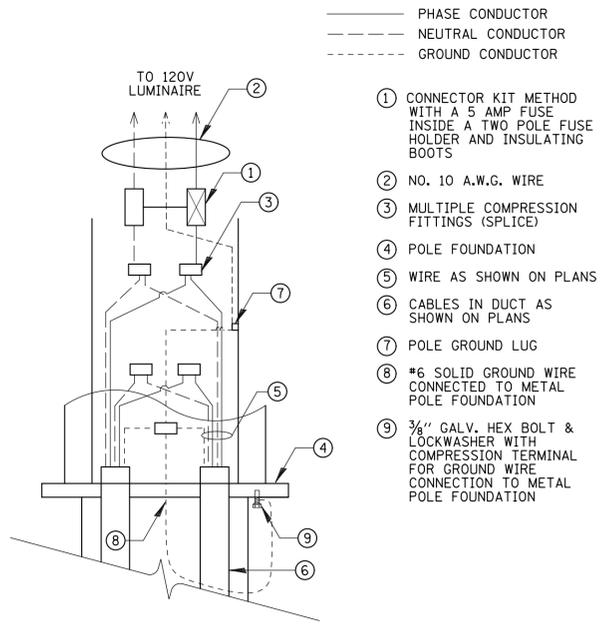


FLOOD LIGHT POLE DETAIL
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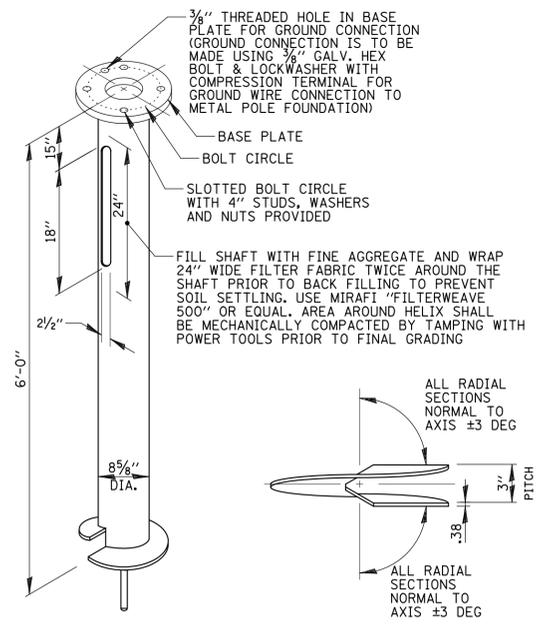


- NOTES:
- GROUND ROD SHALL BE CAST INTO CONCRETE FOUNDATION WITH 8 FEET IN CONTACT WITH SOIL.
 - FOUNDATIONS SHALL BE VIBRATED IN ACCORDANCE WITH IDOT STANDARD PRACTICES.
 - FOUNDATIONS SHALL NOT PROTRUDE MORE THAN 4" ABOVE FINISHED GRADE, INCLUDING ANCHOR RODS.
 - ROADWAY LIGHTPOLE FOUNDATIONS WILL BE PAID FOR UNDER "LIGHT POLE FOUNDATION, 24" DIA."

CONCRETE FOUNDATION DETAIL
N.T.S.



POLE HANDHOLE WIRING DIAGRAM
N.T.S.



HELIX FOUNDATION
HELIX SIDE VIEW

- NOTES:
- ALL MATERIALS SHALL BE GALVANIZED ACCORDING TO AASHTO M111 (LATEST REVISION).
 - ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT./LBS OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
 - THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN POLE INSTALLATION.
 - THE CABLE TRENCH SHALL BE BACK FILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
 - THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
 - ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
 - METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACK FILLING AROUND THE FOUNDATION IS NOT ALLOWED.
 - THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB. METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACE WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST
 - BASE PLATE TO BE PERPENDICULAR TO SHAFT AXIS (± 1 DEG) AND HOLE CENTERLINE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
 - PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (± 125 FIM) AND IN LINE (± 2 DEG).
 - BASE PLATE IS PERMANENTLY STAMPED WITH MANUFACTURER'S IDENTIFICATION "ABC" IN 1/2" LETTERS AND DATE CODE IN 1/4" LETTERS.
 - ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:

HELIX FOUNDATION MATERIALS	
ITEM	MATERIAL REQUIREMENT
BASE PLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

LIGHT POLE METAL FOUNDATION DETAIL
N.T.S.

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(847) 823-0500

CLIENT:
VILLAGE OF OAK LAWN
9446 SOUTH RAYMOND AVENUE
OAK LAWN, ILLINOIS 60453

NO.	DATE	NATURE OF REVISION	CHKD.	MODEL:
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TITLE: **MECHANICAL AND ELECTRICAL**
ELECTRICAL DETAILS (2 OF 2)

PROJ. NO. 17-0048
DATE: 10/25/2019
SHEET 37 OF 38
DRAWING NO. **ELEC-08**



AIR6 XL2™

The Vertex Air6 XL2™ pond aerator is a super-efficient, affordable and safe system. In a typical pond, an Air6 XL2™ can aerate approximately 5-8 acres depending on shape, slope, oxygen demand and other factors. Two 1/2hp (0.75kW) Brookwood™ SafeStart™ compressors, housed in our rustproof aluminum outdoor cabinet, feed six bottom mounted CoActive AirStations™ utilizing Vertex's MicronBubble™ technology. The rising force of millions of bubbles circulates the entire water column, entraining bottom water up to the surface allowing vital oxygen to be absorbed and poisonous gases expelled. With no electricity in the water, Vertex's aeration systems are safe for any type of water recreation.

Our systems have a full 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits) plus a Limited Lifetime warranty against rust and corrosion on the cabinet, 5-year warranty on the AirStations™ and a 15-year warranty on BottomLine™ supply tubing.



FEATURES

- AIRSTATIONXL2™**
- Total pumping capacity of up to 22,600 GPM
 - Twelve 9" flexible membrane discs with MicronBubble™ technology
 - Shallow water Airstation optional for depths lower than 8'
 - Self-cleaning, low maintenance
 - Rugged EPDM construction with vacuum formed and sonic welded HDPE base unit
 - Lipped edge prevents sinking into soft bottom sediments
 - 5-year "No Questions" warranty

- BROOKWOOD™ COMPRESSOR**
- 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits)
 - Vertex SafeStart™ Technology
 - UL, 115v or 230v, 35 Max PSI
 - Thermal overload protection
 - (2)1/2hp (0.75kW): low electrical costs
 - 2-3 year extended duty cycle between scheduled maintenance

- QUIETAIR™ CABINET**
- Class "A" GFCI protection on all 115v circuits
 - Powder coated aluminum for a durable attractive finish
 - Two high capacity 290 CFM fan
 - Easy access design with cam lock
 - Easy plug-in connection to waterside electrical service
 - Disconnect switch
 - Heavy duty, light weight mounting pad included
 - Sound dampening kit optional
 - Limited lifetime warranty against rust

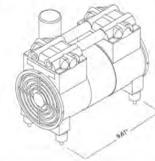
- BOTTOMLINE™ TUBING**
- Over-sized I.D. for high flow
 - Self-weighted for easy installation
 - Available in 100' and 500' increments
 - 15-year Vertex warranty

- BENEFITS TO THE LAKE**
- High pumping rate easily penetrates stratification layers
 - Circulates entire water column
 - Increases oxygen levels throughout water column
 - Promotes beneficial bacteria growth
 - Prevents low oxygen fish kills
 - Reduces nutrient levels and associated algae growth
 - Oxidizes/reduces bottom muck
 - Expands oxygenated habitat for improved fisheries
 - Reduces aquatic midge and mosquito insect hatches
 - Eliminates foul odors from undesirable dissolved gases
 - Safe entry - no electricity in the water
 - Extremely energy efficient

SPECIFICATIONS: AIR6 XL2™ LAKE AERATION SYSTEM

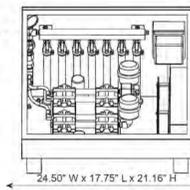
BROOKWOOD™ COMPRESSOR

Two 1/2hp (0.75kW), 115v or 230v, Single Phase piston type compressor. Built for continuous 24/7 operation and equipped with Vertex SafeStart™ technology allowing auto restart under maximum rated pressure without motor damage. Super-duty Brookwood™ compressors incorporate upgraded rotors, stators, valve plates, bearings and capacitors and are thermally protected, oil-free, and require no lubrication; just periodic cleaning of included washable air filter. Extended duty cycle is approximately 2-3 years for compressor maintenance, about 2 to 3 times the duty cycle of ordinary piston and rotary vane compressors. All Brookwood™ SafeStart™ compressors carry a 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits).



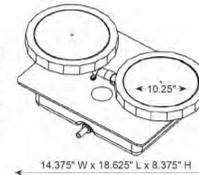
QUIETAIR™ CABINET

Enclosure comes equipped with cam lock for security, fully gasketed and constructed of aluminum with gray electrostatically-bonded powder coating to provide Limited Lifetime warranty against cabinet rust and corrosion. Enclosure furnished with stamped ventilation grills to insure forced air circulation and an integral cooling fan with thermal protection, producing 290 CFM to guard against excessive compressor operating temperatures. Cabinet provided with HDPE mounting pad. Enclosure comes with class A GFCI protection on both the compressor and fan circuits. Quick disconnect switch included. Side mounted muffler box and additional insulation optional for quieter operation.



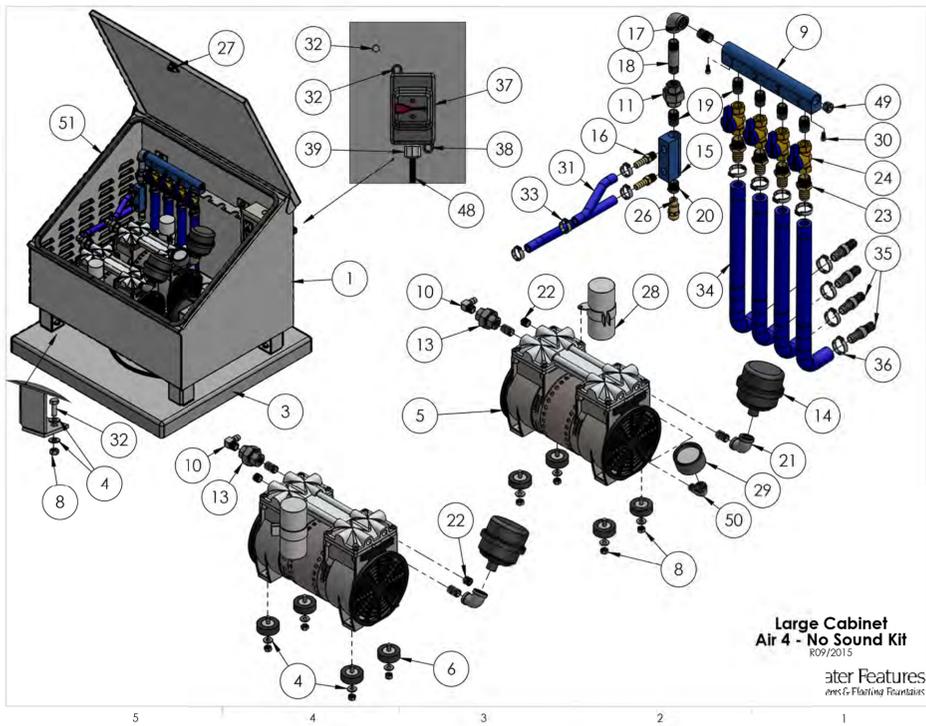
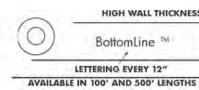
AIRSTATION XL2™ ASSEMBLY

Diffuser station consisting of two self-cleaning, 9" diameter, flexible membrane diffusers of EPDM compound with 100% rebound memory, each producing millions of fine 500 to 3000 micron bubbles - the majority 500 to 1000 microns. Each diffuser station is equipped with vacuum formed HDPE base, sonic spot-welded to provide unit integrity. Base unit is made of hollow chamber design for the addition of inert pea gravel ballast and have lipped design to prevent settling into soft bottom sediments. AIRSTATION™ is designed with adjustable diffuser riser to accommodate any site requirements.

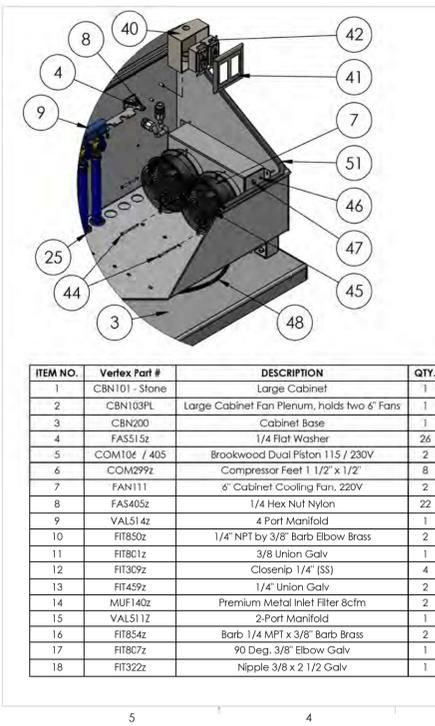


BOTTOMLINE™ SUPPLY TUBING

Self-weighted, direct burial submersible tubing for connection from compressor to diffuser stations. Tubing is flexible PVC composite construction for use with standard PVC solvent weld cement and insert fittings. Tubing has 0.58" I.D. and high wall thickness for long term durability and protection against punctures. Remains flexible in cold temperatures.



Large Cabinet
Air 4 - No Sound Kit
R09/2015
Vertex Water Features
Pond & Lake Aeration



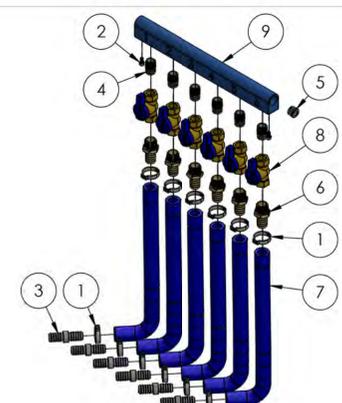
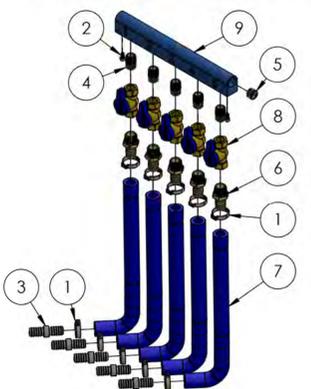
ITEM NO.	Vertex Part #	DESCRIPTION	QTY.
1	CBN101	Stone	1
2	CBN103PL	Large Cabinet Fan Plenum, holds two 6" Fans	1
3	CBN200	Cabinet Base	1
4	FAS515z	1/4 Flat Washer	26
5	COM10z / 405	Brookwood Dual Piston 115 / 230V	2
6	COM299z	Compressor Feet 1 1/2" x 1/2"	8
7	FAN111	6" Cabinet Cooling Fan, 220V	2
8	FAS405z	4 Fan Guard Starless	22
9	VAL514z	4 Port Manifold	1
10	FT850z	1/4" NPT by 3/8" Barb Elbow Brass	2
11	FT8C1z	3/8 Union Galv	1
12	FT130z	Clostrip 1/4" (SS)	4
13	FT459z	1/4" Union Galv	2
14	MUF140z	Premium Metal Inlet Filter 8cm	2
15	VAL511z	2-Port Manifold	1
16	FT854z	Barb 1/4 NPT x 3/8" Barb Brass	2
17	FT8C7z	90 Deg. 3/8" Elbow Galv	1
18	FT322z	Nipple 3/8 x 2 1/2 Galv	1

ITEM NO.	Vertex Part #	DESCRIPTION	QTY.
19	FT131z	Clostrip 3/8 Galv	6
20	FT190z	Bushing 3/8 x 1/4 Galv	2
21	FT820z	Reducing Elbow 3/8 x 1/4 Galv	1
22	FT79z	1/4" Plug Hollow Allen Key Galv	3
23	FT852z	Barb 5/8 by 3/8 MPT Brass	4
24	VAL429z	3/8" Brass Ball Valve	4
25	CBN654z	Rubber Grommet 5/8" ID	4
26	VAL435z	Pop-Off Safety Valve 15psi	1
27	BL100z	Barb Lock with Keys	1
28	COM412z / 409z	Capacitor 115 / 230V	2
29	FT888z	Pressure Gauge 2in Dia. 1/4" Fitting	1
30	FAS100z	Bolt Socket Head Cap 10-32 x 3/8	2
31	HCS099z	Heater Hose 3/8 ID (1.5)	1
32	FAS135z	1/4-20 x 3/4 SS Hex Bolt	6
33	CLP115z	Pinch Hose Clamp	4
34	HCS110z	Heater Hose 5/8" ID	4
35	FT105z	Barb x Barb 1/2" PVC	4
36	CLP116z	1" Pinch Hose Clamp	8
37	CBN300	Cabinet shut off switch	1
38	FAS131z	Hex Bolt 1/4 x 1/2 SS	1
39	CLP099z	Liquid Tight Fittings	3
40	CBN521z	Two Gang Outlet Box	1
41	CBN521z	Two Gang Receptacle Cover	1
42	CBN503z / 516z	Receptacle GFCI-125V-20A / 230V	2
43	CBN529z	Gang Box Wire	1
44	FAS103z	Bolt 8-32 x 2 1/2 (SS)	4
45	FAN114z	6" Fan Guard Starless	2
46	FAS304z	1/4" Spring Lock Washer	4
47	FAS403z	1/4 x 20 Hex Nut	4
48	CBN605z / 6110z	8 Power Chord 115 / 230V	1
49	FT797z	Plug 3/8" Stainless Steel	1
50	FT834z	1/4" Female x Male Elbow	1
51	CBN660z	7 Tirmlock Cabinet Seal	1

Large Cabinet
Air 4
R09/2015
Vertex Water Features
Pond & Lake Aeration

Air 5 - Manifold

ITEM NO.	Vertex Part #	DESCRIPTION	QTY.
1	CLP116z	1" Pinch Hose Clamp	10
2	FAS100z	Bolt Socket Head Cap 10-32 x 3/8	2
3	FT105z	Barb x Barb 1/2" PVC	5
4	FT131z	Clostrip 3/8 Galv	5
5	FT797z	Plug 3/8" Stainless Steel	1
6	FT852z	Barb 5/8 by 3/8 MPT Brass	5
7	HCS110z	Heater Hose 5/8" ID	5
8	VAL429z	3/8" Brass Ball Valve	5
9	VAL512z	5 Port Manifold	1



Air 6 - Manifold

ITEM NO.	Vertex Part #	DESCRIPTION	QTY.
1	CLP116z	1" Pinch Hose Clamp	12
2	FAS100z	Bolt Socket Head Cap 10-32 x 3/8	2
3	FT105z	Barb x Barb 1/2" PVC	6
4	FT131z	Clostrip 3/8 Galv	6
5	FT797z	Plug 3/8" Stainless Steel	1
6	FT852z	Barb 5/8 by 3/8 MPT Brass	6
7	HCS110z	Heater Hose 5/8" ID	6
8	VAL429z	3/8" Brass Ball Valve	6
9	VAL516z	6 Port Manifold	1

Large Cabinet
Air 6
R09/2015
Vertex Water Features
Pond & Lake Aeration