

SUMMARY OF QUANTITIES				CONSTRUCTION CODES																									
NO.	CODE NO.	ITEM	UNIT	TOTAL	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	1000-2A	Y031-1F	
96.	XX005931	TRAFFIC SIGNAL POST, 16 FOOT (SPECIAL)	EACH	22	4		2																						
97.	XX005932	TRAFFIC SIGNAL POST, 18 FOOT (SPECIAL)	EACH	1																									
98.	XX005940	REMOTE-CONTROLLED VIDEO SYSTEM	EACH	13	1		1		1																				
99.	XX006390	VIDEO COMMUNICATIONS SYSTEM AND CABINET	EACH	1																									
100.	X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	11	1		1		1																				
101.	XX006938	OPTIMIZE TRAFFIC SIGNAL SYSTEM (SPECIAL)	EACH	1																									
102.	XX007017	TERMINATE FIBER IN CABINET	EACH	36																									
103.	Z0076600	TRAINEES	HOUR	500																									
104.	XX008251	SPLICE FIBER IN CABINET	EACH	12																									
105.	XX008252	QUAD ENCODER	EACH	1																									
106.	XX008253	VIDEO ENCODER	EACH	14	1		1		1																				
107.	XX008254	LAYER III FIBER OPTIC TRANSCIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	3																									
108.	XX008255	LAYER III FIBER OPTIC TRANSCIVER MODULE, GBIC TYPE, LONG DISTANCE	EACH	1																									
109.	XX008256	UPGRADE EXISTING CONTROLLER TO NTPC (SPECIAL)	EACH	7																									
110.	XX006655	LAYER II (DATA LINK) SWITCH	EACH	13																									
111.	XX007018	LAYER III (NETWORK) SWITCH	EACH	1																									

THE LAYER III FIBER OPTIC TRANSCIVER MODULE, GBIC TYPE, LONG DISTANCE SHALL BE INSTALLED BY A LAKE COUNTY DIVISION OF TRANSPORTATION CONSULTANT IN THE ISTHA BUILDING (M4) LOCATED AT I-94 (TRI-STATE TOLLWAY) AND ILL. RTE 132 (GRAND AVE), BUT PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE CONTRACTOR SHALL COORDINATE WITH LAKE COUNTY DIVISION OF TRANSPORTATION (847) 377-7400 AND ILLINOIS STATE HIGHWAY AUTHORITY (630) 241-6800.

* SPECIALTY ITEMS Δ YORO
Revised 1-4-10

SPECIAL CONDITIONS FOR CONSTRUCTION WITHIN A LAKE COUNTY HIGHWAY RIGHT-OF-WAY

Work Notification
Prior to starting construction, the Maintenance Section, 847-362-3960, and the Permit Section, 847-362-3950, shall be called and given the construction start date.

Specifications
The construction and restoration methods and procedures, materials used and construction signing and traffic control shall, when applicable, conform or meet the standards and requirements set forth in the current "Manual on Uniform Traffic Control Devices for Street and Highways", "Standard Specifications for Road and Bridge Construction", "Standard Specification for Traffic Control Items", and the "Highway Standards" manual as published or adopted by the Illinois Department of Transportation.

Field Changes for Watermain or Sewer Location
No changes to the depth or location of the watermain or sewer as shown on these plans due to unforeseen field conditions or conflicts can be made unless prior approval has been obtained from the Permit Section of the Lake County Division of Transportation.

Additions, Extensions or Deletions for the Watermain or Sewer
No additions, extensions or deletions can be made to the watermain or sewer as shown on these plans unless prior approval has been obtained from the Permit Section of the Lake County Division of Transportation.

Hazards to the Public
Measures shall be taken to prevent or protect the public from hazards caused by the construction operations.

Parking of Vehicles, Equipment and Storage of Materials
Construction worker's vehicles and construction equipment shall be parked in areas outside of the County Highway right-of-way or in areas where there will be no interference with the normal use of the highway or vehicle sight distance. Construction materials shall be located at least 12 feet from a through traffic lane or outside of the County Highway right-of-way.

Maintaining Existing Traffic Control Devices
Existing traffic control devices that are removed shall be re-erected as soon as possible. Damaged or lost traffic control signs shall be reported to the Sign Shop 847-362-3962 of the Lake County Division of Transportation for replacement. Regulatory and warning traffic signs shall be kept in view of the highway traffic.

Existing Drainage and Access
Disturbed highway drainage facilities shall be re-established at the close of each workday. Occupants of adjacent properties having access to the County Highway shall be notified prior to being blocked and suitable arrangements made with the occupants. Adjacent property access shall be re-established as soon as possible.

Highway Pavements
Care shall be taken not to break, crack or damage the highway pavement with equipment operating on it. Also, any dirt of debris tracked onto the highway pavement shall be removed. Equipment with grozer pods, cleats or studs are not permitted to operate on the highway pavement.
If, due to construction operations, the highway pavement becomes damaged or undermined, all construction work in that area shall be stopped and the highway pavement repaired as directed by the Lake County Division of Transportation. Alternate construction measures shall then be used to prevent further highway pavement damage.

Excavations, Trenches and Bore Pits
Excavated material shall, when practical, be piled on the near traffic side of the excavation, trench or bore pit. Open excavations, trenches or bore pits remaining after working hours shall not exceed 50 feet in length and shall be properly protected (fencing, covered, etc.) and marked (Type I or II barricades). If barricades are used in series, only steady burning lights shall be used. Bore pits shall be located no closer than 10 feet to the highway pavement, back of curb or gutter, or shoulder break line, whichever is further. If casing pipes are used, the voids in the casing pipe shall be filled and/or the ends sealed so there will be no siltation into the casing pipe.

Manholes, Valves, Valve Vaults and Appurtenances
The top of the frame and lid or cover of a manhole, valve, or valve vault shall be flush and contoured to the surrounding ground. If this is not possible due to an excessive slope, the surrounding ground shall be regraded or the frame and lid or cover partially buried to provide for a gradual transition slope so the area can be safely mowed and no hazard to the public will result. The top of the frame and lid or cover that is located within the gravel shoulder shall have a asphalt apron installed around the frame or cover as directed by the Lake County Division of Transportation. Any frame and lid or cover located in a paved area shall be contoured and 1/4 inch below the surface of the surrounding pavement. The top of frame and lid or cover shall not be located within the area of 27.5 feet to 30.5 feet from the highway pavement centerline.
Surface appurtenances that extend above the surrounding ground surface shall be located within two feet of the County Highway right-of-way.

Tile Lines and Storm Sewers
Existing tile lines and storm sewers that are encountered during construction operations shall be replaced if broken with like size and kind of material. The line and storm sewer crossings of the excavation shall be bridged with rigid materials such as wood or steel. The location and depth of any encountered tile lines and storm sewers shall be recorded and a copy given to the Lake County Division of Transportation.

SPECIAL CONDITIONS FOR CONSTRUCTION WITHIN A LAKE COUNTY HIGHWAY RIGHT-OF-WAY (CONTD)

Winter Construction Work
Snow and ice removal operations of the Lake County Division of Transportation shall have precedence over the construction operations. A 12 foot wide (minimum) clear area from the highway pavement edge shall be maintained for the roadside storage of snow and ice. No construction equipment or materials shall be stored in this 12 foot wide (minimum) clear area nor shall any piles of dirt or excavated materials be left in this area.

Restoration and Clean-Up
The area of the County Highway right-of-way disturbed by construction operations shall be kept to a minimum and shall be restored as promptly as weather and soil conditions permit. If restoration is not accomplished voluntarily, the Lake County Division of Transportation may set a final date for the completion of the restoration work.
Turf areas of the right-of-way disturbed by construction operations shall be compacted and regraded to an equal or better condition than existed before construction. Sod shall be used in high erosion areas. This restoration work will not be considered completed until the turf cover is established.
Gravel and paved shoulders that are damaged shall be replaced as directed by the Lake County Division of Transportation. Driveways, side roads and other accesses, which are damaged, shall be restored with similar materials and thickness. The edges of excavated paved surfaces shall be sawcut prior to repair. Culverts, storm sewer systems and other drainage facilities including ditch lines shall be cleaned of siltation and debris due to the construction operations. Other areas of the right-of-way that have been disturbed such as curb and gutters shall be restored with similar materials.
Any damaged property of the County of Lake, its Division of Transportation, or of others (including utility companies) shall be repaired or replaced or the owner of the damaged property reimbursed for the costs of repairing the damaged property by the owner.
Restoration Guarantee
Any restoration work that falls within one year of completion shall be redone. Also, any settlement that occurs within one year of completion of the surface restoration work shall be filled and the surface area restored.
Keeping Roads Open to Traffic
All roads shall remain open to traffic. The Contractor may close one lane because of construction only between the hours of 9:00 A.M. and 3:00 P.M. The Contractor shall maintain traffic during these restricted hours as shown on the Traffic Control Standards. Two lanes of traffic will be maintained between 3:00 P.M. and 9:00 A.M. and when no construction activities are being carried out. Traffic routed around construction areas shall be over paved surfaces and not over gravel shoulders.

I.D.O.T. GENERAL NOTES
BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF WAUKEGAN.
THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE II BARRICADE USED-ONE (1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

GENERAL NOTES

A-1. THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, PROJECT SPECIFICATIONS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, THE CITY OF WAUKEGAN, LAKE COUNTY DIVISION OF TRANSPORTATION, ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERETO SHALL GOVERN THIS WORK.

A-2. THE STANDARD SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.

A-3. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED FOR CONSTRUCTION. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE RESIDENT ENGINEER SHALL BE FINAL AND CONCLUSIVE.

A-4. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER OR HIS REPRESENTATIVES. FINAL PAYMENT WILL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.

A-5. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC., SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

A-6. THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

A-7. DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER AND THE CITY.

A-8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

A-9. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

A-10. EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES, J.U.L.I.E., DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THEM.

A-11. THE CITY OF WAUKEGAN SHOULD BE CONTACTED 48 HOURS PRIOR TO THE START OF ANY EXCAVATION. (847-625-8827)

A-12. AGGREGATE SPECIFIED ON THESE PLANS SHALL BE CONSIDERED CRUSHED STONE MEETING THE GRADATION SPECIFIED. CRUSHED CONCRETE MAY NOT BE SUBSTITUTED FOR CRUSHED STONE, UNLESS APPROVED BY THE RESIDENT ENGINEER.

A-13. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS 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. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

A-14. REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE DISPOSED OF OFFSITE AT LOCATIONS PROVIDED BY THE CONTRACTOR AT HIS EXPENSE.

A-15. ALL PROPOSED SIDEWALK REMOVAL, COMBINATION CURB AND GUTTER REMOVAL, PCC SIDEWALK, 5" AND COMBINATION CONCRETE CURB AND GUTTER B6.12 OR B6.24 IDENTIFIED ON THE TEMPORARY TRAFFIC SIGNAL INSTALLATION OR THE TRAFFIC SIGNAL MODERNIZATION PLANS SHALL BE MARKED IN THE FIELD BY THE RESIDENT ENGINEER.

PAVING AND GRADING NOTES

C-1. ALL PAVEMENT DIMENSIONS ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE INDICATED.

C-2. PAVING WORK SHALL INCLUDE FINAL SUB-GRADE SHAPING AND PREPARATION, FORMING, PLACEMENT OF BASE COURSE MATERIALS, AND SUBSEQUENT BINDER AND/OR SURFACE COURSES, FINISHING AND CURING OF CONCRETE, FINAL CLEAN-UP AND ALL RELATED WORK.

C-3. PAVEMENT DESIGN SHALL BE AS DETAILED. PRIOR TO THE PLACEMENT OF ANY STONE BASE ALL SUBBASE SHALL BE COMPACTED WITH A SELF-PROPELLED SHEEPSFOOT COMPACTOR (CAT 815 OR LARGER) TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. TESTING SHALL BE BY NUCLEAR DENSITY TEST AND PROOF ROLLING. THE CONTRACTOR SHALL PROOF ROLL THE SUBGRADE BEFORE PAVEMENT CONSTRUCTION PROCEEDS. THE PROOF ROLL MUST BE WITNESSED BY THE ENGINEER AND A REPRESENTATIVE OF THE VILLAGE. THE SUBGRADE WILL NOT BE APPROVED AND ACCEPTED WITHOUT PROOF ROLLING. THE PROOF ROLLING SHALL BE DONE BY A FULLY LOADED THREE-AXLE DUMP TRUCK TOGETHER WITH LOAD WEIGHING AT LEAST TWENTY-FIVE (25) TONS. IF THE SUBGRADE OR BASE HAS FAILURE OR PUMPING AS INDICATED BY PROOF ROLLING, THE AREA OF FAILURE OR PUMPING SHALL BE SCARIFIED AND RECOMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SUBSEQUENT PROOF ROLL WILL BE CONDUCTED UNTIL THE SUBGRADE IS FOUND TO BE ACCEPTABLE TO THE ENGINEER.

C-4. ALL DISTURBED NON-PAVEMENT AREAS SHALL BE ROUGH GRADED. THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION PREVENTION AND REPAIR.

C-5. ALL CURB AND SIDEWALK SHALL BE REINFORCED WITH TWO #4 REBARS (THREE EQUALLY SPACED REBAR FOR SIDEWALK) WHENEVER THE CURB OR SIDEWALK CROSSES A UTILITY TRENCH. EXTENDING THE REBAR TEN FEET BEYOND THE TRENCH ON BOTH SIDES.

C-6. EXTRA CARE SHALL BE EXERCISED WHEN OPERATING EQUIPMENT AROUND TREES AND SHRUBS. INJURED BRANCHES OR ROOTS SHALL BE PRUNED IN A MANNER SATISFACTORY TO THE ENGINEER AND SHALL BE PAINTED WHERE THE CUT WAS MADE. ROOTS EXPOSED DURING EXCAVATING OPERATIONS SHALL BE NEATLY PRUNED AND COVERED WITH TOPSOIL. THIS WORK SHALL BE DONE AS SOON AS POSSIBLE AND SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

☐ DENOTES A REFERENCE TO A PAY ITEM INCIDENTAL TO THE CONTRACT OR ANOTHER PAY ITEM WITHIN THE CONTRACT.