

WVILLE TALBOT

ADDRESS #3S140 TALBOT AVENUE

ENGINEERING IMPROVEMENT PLANS

LEGAL DESCRIPTION

LOT 1 (EXCEPT THE WESTERLY 40 FEET THEREOF AS DEDICATED FOR HIGHWAY BY R89-6453) IN ROBERT BARTLETT'S GREEN ACRES, BEING A SUBDIVISION IN THE EAST HALF OF SECTION 33 AND IN THE WEST HALF OF SECTION 34, TOWNSHIP 39 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 20, 1943 AS DOCUMENT 454884, IN DUPAGE COUNTY, ILLINOIS.

PARCEL AREA: 2.53 ACRES



CONSTRUCTION SCHEDULE:

- | | |
|---|-------------|
| A. EROSION CONTROL | 2 MONTHS |
| B. STRIPPING & CLEARING OF SITE | 2 MONTHS |
| C. ROUGH GRADING & CONSTRUCTION | 3 MONTHS |
| D. TOP OF FOUNDATION AS-BUILT | SUMMER/2025 |
| E. FINAL GRADING & LANDSCAPING & REMOVE TEMPORARY FENCING | SPRING/2026 |

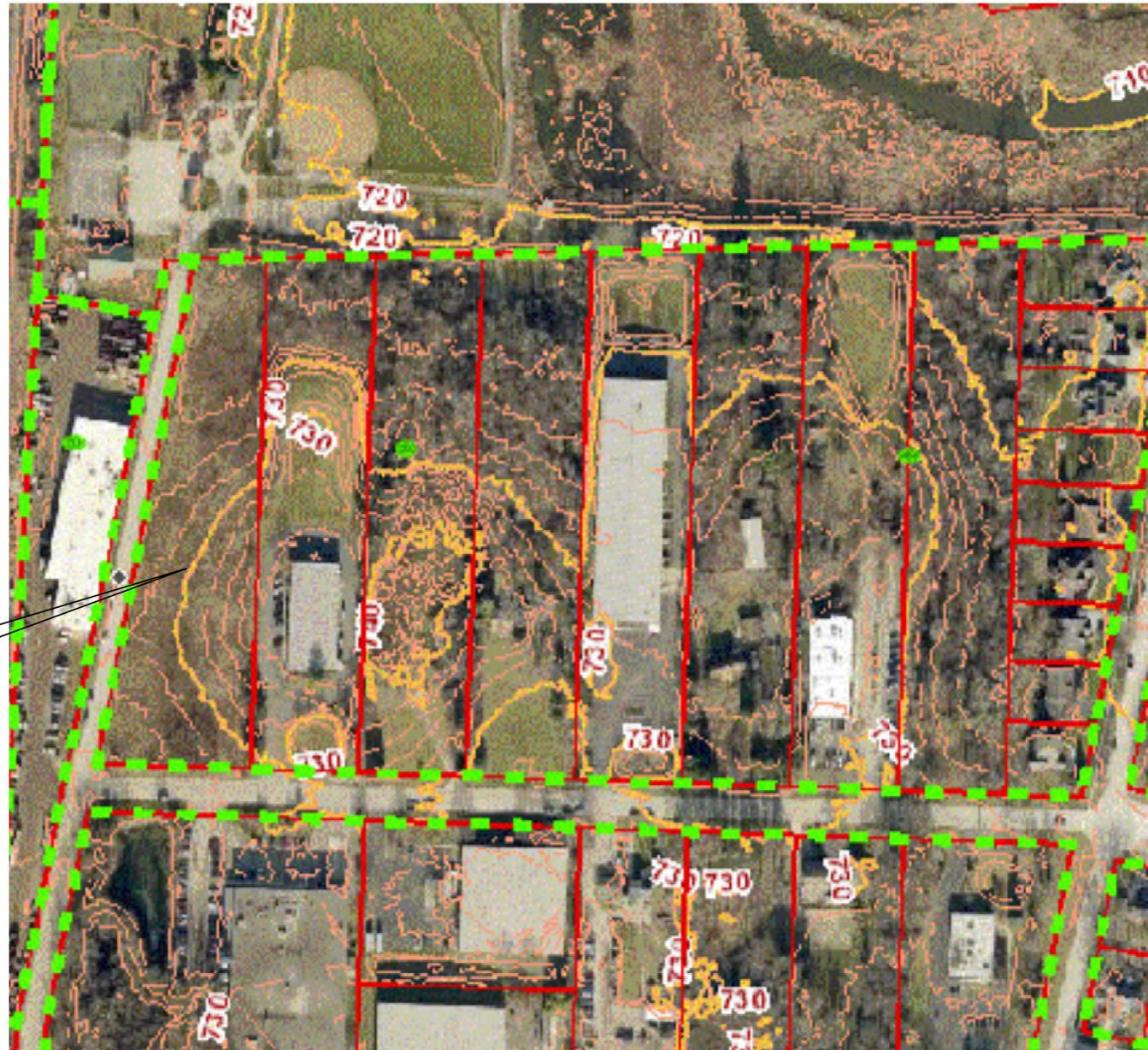
BENCHMARK

REFERENCE BENCHMARK:

DUPAGE COUNTY GEODETIC SURVEY MONUMENT
BENCHMARK W134002 RESET
PID: DPO966, NORTHING 1877110, EASTING 1022479,
ELEVATION 704.27 NAVD 88
BRASS TABLET IN SE HEADWALL OF ROUTE 56 BRIDGE
OVER CREEK 0.5 MILES EAST OF ROUTE 59

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LOCATION MAP

E1/2 SECTION 33 & W1/2 SECTION 34-39N-9E

PIN: 04-33-202-013



BUILDER IS RESPONSIBLE FOR INSURING THAT CONTRACTOR IS IN CONFORMANCE WITH ALL ON SITE SPECIFICATIONS.

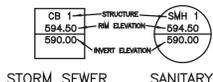
THE UNDERSIGNED HEREBY CERTIFY THAT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF, OR THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

ENGINEER: *Kevin Chaffin*



LEGEND

	EXISTING	PROPOSED
WATER MAIN	— W —	— W —
STORM SEWER	— S —	— S —
SANITARY SEWER	— SS —	— SS —
MANHOLE	○	○
STORM MANHOLE	○	○
INLET	□	□
FLARED END SECTION	□	□
FIRE HYDRANT	⊕	⊕
WATER VALVE	⊕	⊕
SPRINKLER	⊕	⊕
CANISTER	⊕	⊕
POWER POLE	⊕	⊕
LIGHT POLE	⊕	⊕
TOP OF FOUNDATION	T/F: 700.00	T/F: 700.00
SPOT ELEVATION	x 870.30	x 870.30
SWALE	↔	↔
OVERLAND FLOW ROUTE	↔	↔
BUMPER STOP	—	—
B6.12 CURB & GUTTER	—	—
B6.12 REVERSE PITCH	—	—
TEMPORARY SILT FENCE	—	—
TEMPORARY INLET FILTER	—	—
RIP-RAP	—	—
FIRE CONNECTION	—	—
EASEMENT	—	—
DRAINAGE AREAS	—	—
DETENTION HWL	—	—



INDEMNIFICATION'S AND INSURANCE REQUIREMENTS:

IN ADDITION TO THE INDEMNIFICATION AND INSURANCE REQUIREMENTS DESIGNATED IN OTHER BIDDING OR SPECIFICATION DOCUMENTS TO THE FULLEST EXTENT PERMITTED BY LAW, THE CONTRACTOR AGREES TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER, ENGINEER, AND VILLAGE/CITY, AND THEIR OFFICERS, EMPLOYEES, AND AGENTS FROM ALL LOSSES, COSTS, LOSS OF USE, DAMAGES OR BODILY INJURY, INCLUDING DEATH, AND ALL ATTORNEY'S FEES AND COSTS RESULTING FROM THE WORK OR SERVICES OF THE CONTRACTOR OR THOSE FOR WHOM HE IS RESPONSIBLE WITHOUT ANY LIMITATIONS ON THE OWNER'S, ENGINEER'S, OR VILLAGE'S/CITY'S, OTHER RIGHTS. IN ADDITION, CERTIFICATES OF INSURANCE ADDING THE OWNER, ENGINEER, AND VILLAGE/CITY, AND THEIR OFFICERS, EMPLOYEES AND AGENTS, AS ADDITIONAL INSURED ON THE CONTRACTOR'S GENERAL PUBLIC LIABILITY AND PROPERTY DAMAGE POLICY AND PROTECTIVE LIABILITY INSURANCE POLICY, SAID CERTIFICATE HAVING A 30 DAY ADVANCED NOTICE OF CANCELLATION CLAUSE.

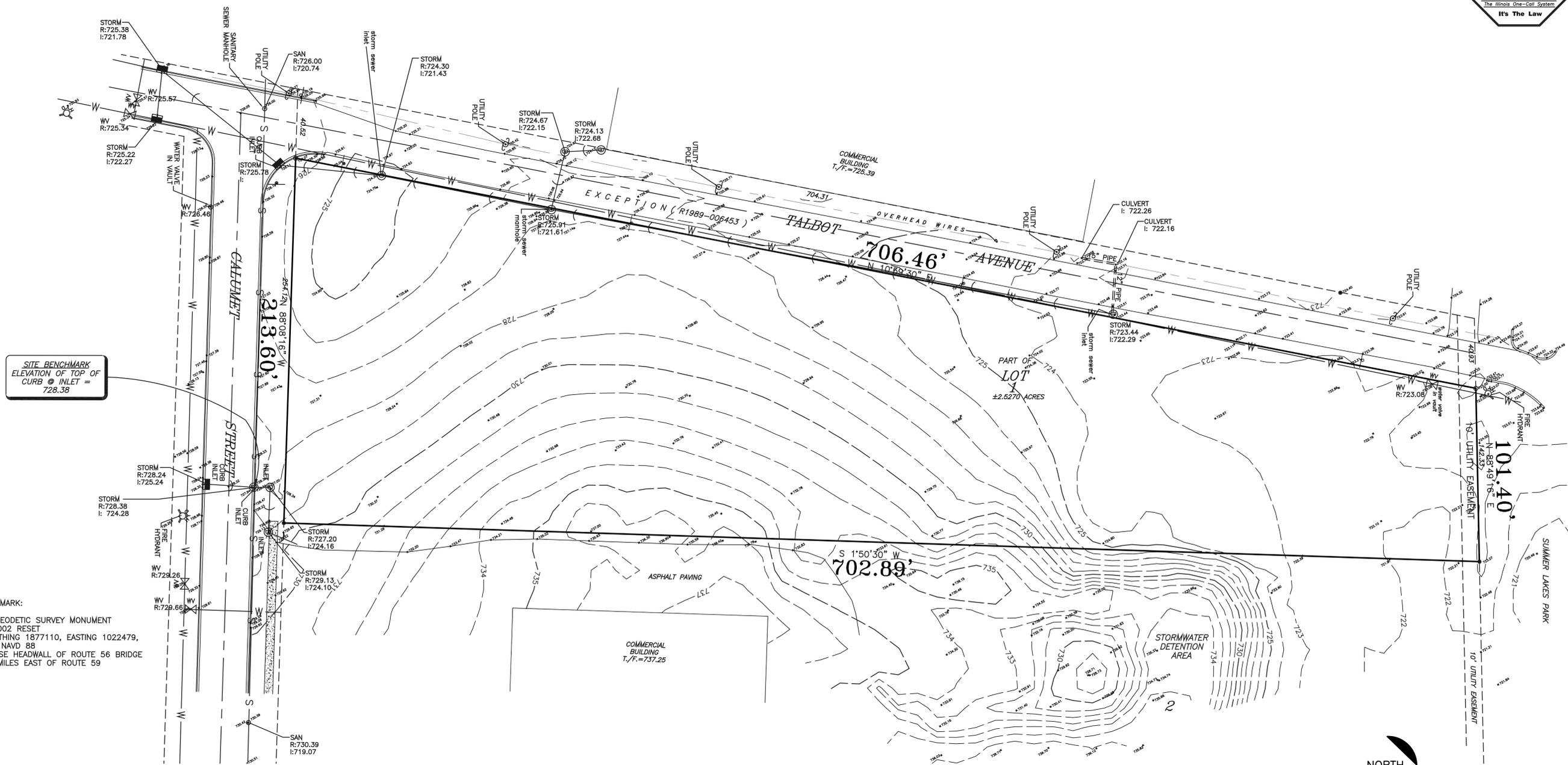
THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION UNTIL CERTIFICATES OF INSURANCE INDEMNIFYING AND ADDING AS ADDITIONAL INSURED THE OWNER, ENGINEER, THE VILLAGE/CITY, AND THEIR OFFICERS, EMPLOYEES AND AGENTS, HAVE BEEN DELIVERED TO AND APPROVED BY KDC CONSULTANTS INC. AND THE VILLAGE/CITY. FAILURE TO DO SO DOES NOT RELIEVE THE CONTRACTOR OF THIS OBLIGATION.

THE FOLLOWING ARE THE MINIMUM INSURANCE REQUIREMENTS:

- A. PUBLIC LIABILITY BODILY INSURANCE OF NOT LESS THAN ONE MILLION DOLLARS (\$1,000,000) FOR INJURIES, INCLUDING DEATH, TO ANY ONE PERSON, AND SUBJECT TO THE SAME LIMIT FOR EACH PERSON, IN AN AMOUNT OF NOT LESS THAN TWO MILLION DOLLARS (\$2,000,000) ON ACCOUNT OF ONE ACCIDENT.
- B. PUBLIC LIABILITY PROPERTY DAMAGE INSURANCE IN AN AMOUNT OF NOT LESS THAN FIVE-HUNDRED THOUSAND DOLLARS (\$500,000).
- C. AUTOMOBILE PUBLIC LIABILITY BODILY INJURY \$1,000,000/\$2,000,000 AND PROPERTY DAMAGE \$2,000,000 LIMITS.
- D. CONTRACTUAL INSURANCE OF THE SAME LIMITS AS REQUIRED UNDER PARAGRAPH (A.).

DATED: JULY 7, 2025		ENGINEERED BY: KDC CONSULTANTS INC. WWW.KDCCONSULTANTSINC.COM 16144 S. BELL ROAD HOMER GLEN, ILLINOIS 60491 (708) 645-0545	
REVISION	DATE	PREPARED FOR: WVILLE TALBOT LLC 11551 W 184TH PLACE ORLAND PARK, ILLINOIS 60467 (708) 995-1727 FAX 995-7320	
ORIGINAL	08/20/21		
CITY COMMENTS	11/30/21		
CITY COMMENTS	05/18/22		
CITY COMMENTS	07/07/25	PROJECT 20-04-036-ENG	
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SITE BENCHMARK
 ELEVATION OF TOP OF CURB @ INLET = 728.38

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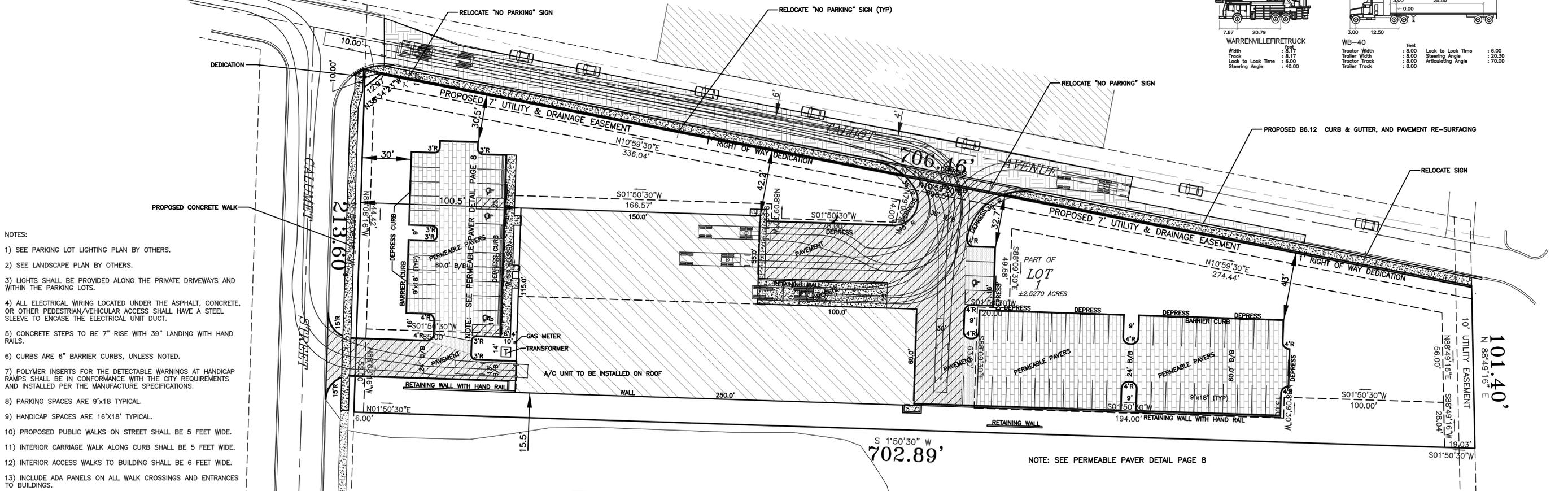
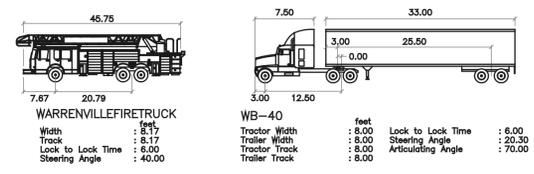
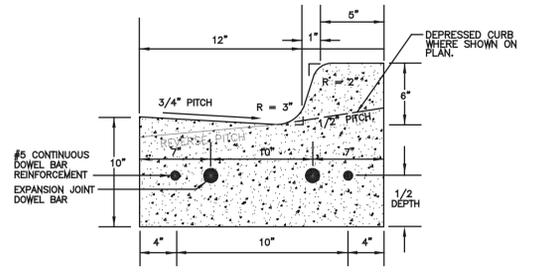
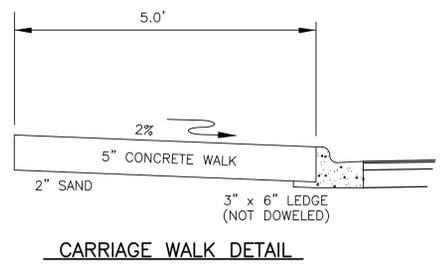
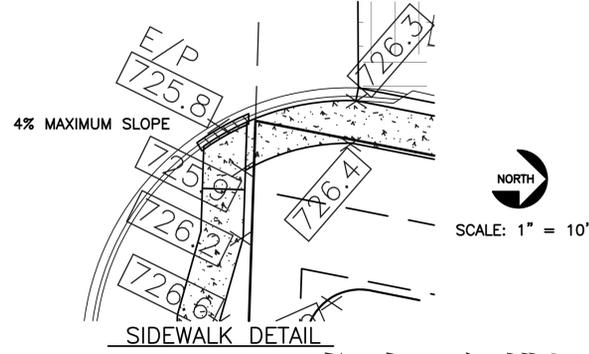


SCALE: 1" = 30'

- NOTES:
- 1) ANY EXISTING WELLS TO BE CAPPED IN ACCORDANCE WITH VILLAGE REQUIREMENTS.
 - 2) ONSITE DRAINTILES TO BE REMOVED BY THE EARTHMOVER. DRAINTILES TO SITE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM BY THE UNDERGROUND UTILITY CONTRACTOR.
 - 3) ANY DRAIN ENCOUNTERED WITH FLOW COMING FROM OFF-SITE MUST BE CONNECTED TO THE STORM SEWER SYSTEM.

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REVISION	DATE	16144 S. BELL ROAD HOMER GLEN, ILLINOIS 60491 (708) 645-0545	
ORIGINAL	08/20/21	WVILLE TALBOT EXISTING CONDITIONS	
CITY COMMENTS	11/30/21		
CITY COMMENTS	07/07/25	PROJECT 20-04-036-ENG	
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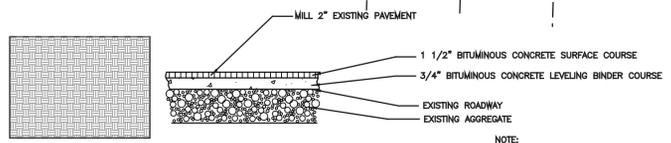
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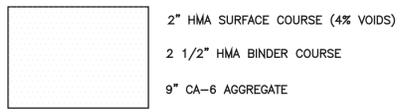
- NOTES:
- 1) SEE PARKING LOT LIGHTING PLAN BY OTHERS.
 - 2) SEE LANDSCAPE PLAN BY OTHERS.
 - 3) LIGHTS SHALL BE PROVIDED ALONG THE PRIVATE DRIVEWAYS AND WITHIN THE PARKING LOTS.
 - 4) ALL ELECTRICAL WIRING LOCATED UNDER THE ASPHALT, CONCRETE, OR OTHER PEDESTRIAN/VEHICULAR ACCESS SHALL HAVE A STEEL SLEEVE TO ENCASE THE ELECTRICAL UNIT DUCT.
 - 5) CONCRETE STEPS TO BE 7" RISE WITH 39" LANDING WITH HAND RAILS.
 - 6) CURBS ARE 6" BARRIER CURBS, UNLESS NOTED.
 - 7) POLYMER INSERTS FOR THE DETECTABLE WARNINGS AT HANDICAP RAMPS SHALL BE IN CONFORMANCE WITH THE CITY REQUIREMENTS AND INSTALLED PER THE MANUFACTURE SPECIFICATIONS.
 - 8) PARKING SPACES ARE 9'x18' TYPICAL.
 - 9) HANDICAP SPACES ARE 16'x18' TYPICAL.
 - 10) PROPOSED PUBLIC WALKS ON STREET SHALL BE 5 FEET WIDE.
 - 11) INTERIOR CARRIAGE WALK ALONG CURB SHALL BE 5 FEET WIDE.
 - 12) INTERIOR ACCESS WALKS TO BUILDING SHALL BE 6 FEET WIDE.
 - 13) INCLUDE ADA PANELS ON ALL WALK CROSSINGS AND ENTRANCES TO BUILDINGS.

NOTE:
USE ADA COMPLIANT PERMEABLE PAVER MATERIALS AND DESIGN TO MARK HANDICAP PARKING SPACES.

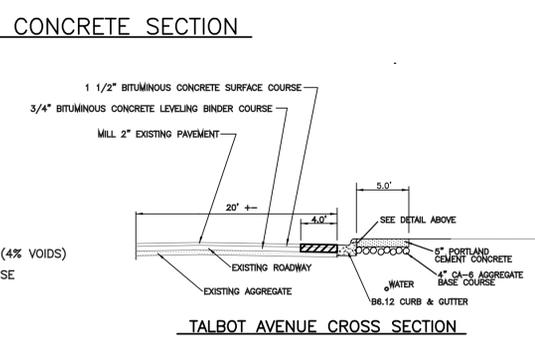
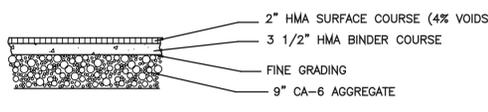
	IMPERVIOUS AREA:		
	SOUTH SF	NORTH SF	TOTAL SF
PROPOSED BUILDING:	11,625	11,625	23,250
PROPOSED PAVEMENT:	3,094	11,115	14,209
AREA (acres)	0.34	0.52	0.86
TRIB. AREAS (acres)	0.89	1.64	2.53
PERMEABLE PAVERS	6,613	10,980	17,593



STRUCTURAL NUMBER	
SURFACE	2.0" X 0.40
BINDER	2.5" X 0.33
STONE	9.0" X 0.10
	SN 2.53



STRUCTURAL NUMBER	
SURFACE	2.0" X 0.40
BINDER	3.5" X 0.33
STONE	9.0" X 0.10
	SN 2.86



DATE:	JULY 7, 2025
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WVILLE TALBOT
GEOMETRY PLAN

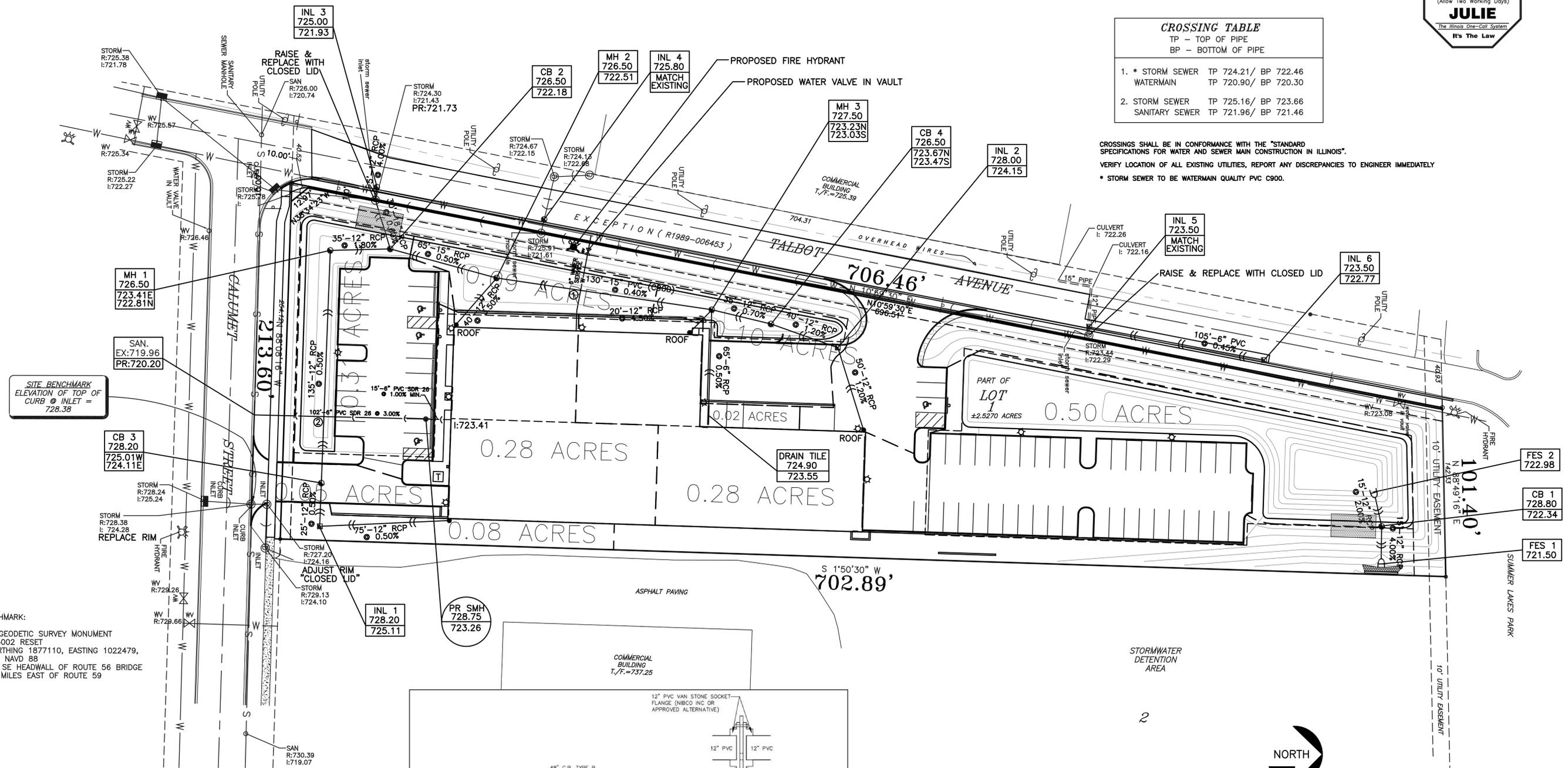
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CROSSING TABLE
 TP - TOP OF PIPE
 BP - BOTTOM OF PIPE

1. * STORM SEWER	TP 724.21/ BP 722.46
WATERMAIN	TP 720.90/ BP 720.30
2. STORM SEWER	TP 725.16/ BP 723.66
SANITARY SEWER	TP 721.96/ BP 721.46

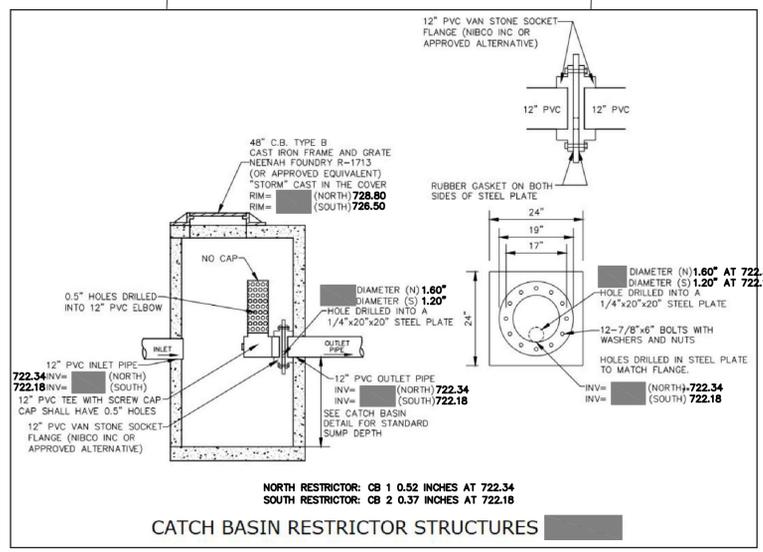
CROSSINGS SHALL BE IN CONFORMANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
 VERIFY LOCATION OF ALL EXISTING UTILITIES, REPORT ANY DISCREPANCIES TO ENGINEER IMMEDIATELY
 * STORM SEWER TO BE WATERMAIN QUALITY PVC C900.



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PROPOSED DETENTION TABLE

TRIBUTARY	NORTH	SOUTH
TRIB. AREA	1.64	0.89
IMPERVIOUS	0.52 AC	0.34 AC
HWL	727.79	728.46
RELEASE	0.16 CFS	0.09 CFS
STORAGE	0.67 AC-FT	0.40 AC-FT
PAVER STORAGE	2.45' DEEP	2.45' DEEP
	0.22 AC-FT	0.13 AC-FT



- NOTES:
1. WATERMAIN AND SANITARY STUBS SHALL BE FITTED WITH PLUGS AND STAKED.
 2. THE GENERAL CONTRACTOR IS TO VERIFY THE LOCATION OF ALL STUBS IN THE FIELD. IF THERE ARE ANY DISCREPANCIES, NOTIFY THE DESIGN ENGINEER AT ONCE. NO WORK SHALL BE STARTED UNTIL THE DISCREPANCIES ARE SOLVED.
 3. PROTECT EXISTING UTILITIES AT ALL TIMES.
 4. ALL STORM WATER INLETS, CATCH BASINS AND MANHOLES SHALL BE OPEN LID.

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ORIGINAL	08/20/21
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WILLE TALBOT
 UTILITY PLAN

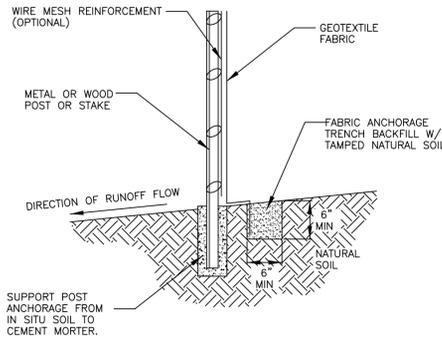
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LEGEND	
TEMPORARY FILTER BASKETS	PROPOSED
TEMPORARY SILT FENCE	
STOCKPILE	

- NOTE:
1. PROVIDE SILT FENCE AROUND PERIMETER OF SITE.
 2. STOCKPILES SHALL BE SEEDED IF UNDISTURBED OVER 7 DAYS. THE COST OF SEEDING SHALL BE INCLUDED WITH EROSION CONTROL COST.
 3. DISTURBED AREAS SHALL BE TEMPORARILY SEEDED.
 4. PROVIDE "SILT SAVER" (OR EQUAL) FRAMES AND FILTER ASSEMBLIES OVER ALL STORM SEWER STRUCTURES.



NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH W/ HOG RINGS, STEEL POSTS W/TIE WIRES, WOOD POSTS W/NAILS.

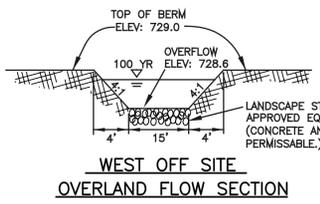
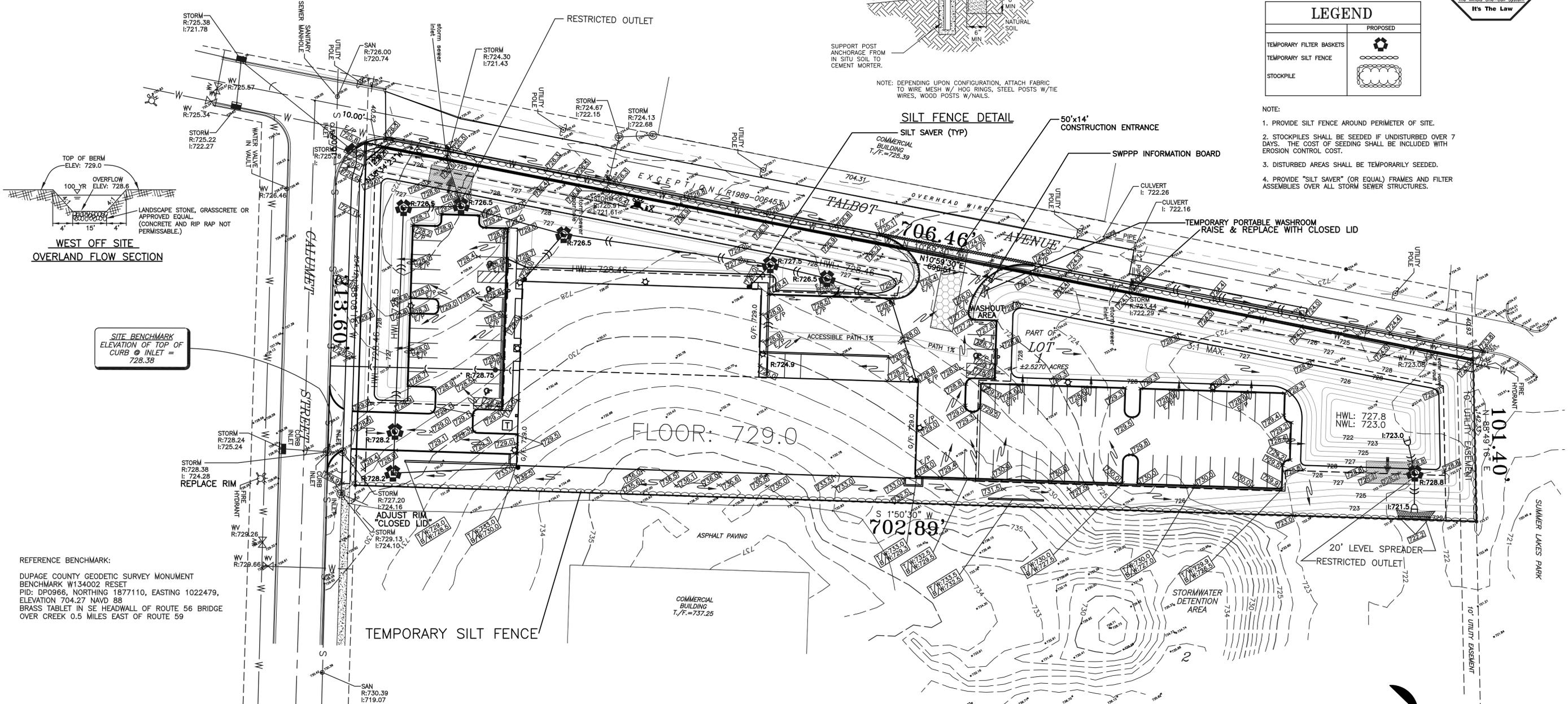
SILT FENCE DETAIL

SILT SAVER (TYP)

50'x14' CONSTRUCTION ENTRANCE

SWPPP INFORMATION BOARD

TEMPORARY PORTABLE WASHROOM RAISE & REPLACE WITH CLOSED LID



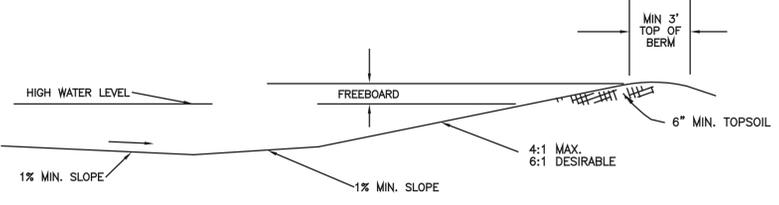
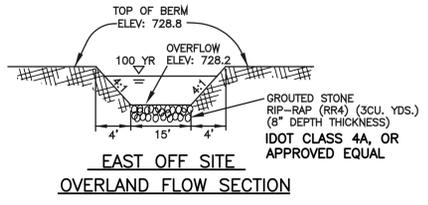
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SCALE: 1" = 30'

- NOTES:
- 1) ELEVATIONS SHOWN AT CURBS ARE TOP OF CURB, UNLESS OTHERWISE NOTED.
 - 2) RETAINING WALLS THAT ARE OVER TWO (2) FEET HIGH SHALL BE DESIGNED BY A REGISTERED ENGINEER. A REGISTERED STRUCTURAL ENGINEER SHALL INSPECT THE RETAINING WALL AS IT IS BEING CONSTRUCTED.
 - 3) CONCRETE STEPS TO BE 7" RISE WITH 39" LANDING WITH HAND RAILS.



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WVILLE TALBOT
GRADING & EROSION CONTROL PLAN

CONTROL MEASURE GROUP	CONTROL MEASURE	APPL.	CONTROL MEASURE CHARACTERISTICS	TEMP.	PERMIT
VEGETATIVE SOIL COVER	TEMPORARY SEEDING	X	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED ON THE DAY OF YEAR IS INAPPROPRIATE.	X	
	PERMANENT SEEDING	X	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION. FILTERS, SEDIMENT FROM WATER, MAY BE PART OF FINAL LANDSCAPE PLAN.		X
	DORMANT SEEDING		SAME AS PERMANENT SEEDING EXCEPT IT IS SEEDED DURING DORMANT SEASON. HIGHER RATES OF SEED APPLICATION ARE REQUIRED.	X	X
	SODDING		QUICK PERMANENT COVER TO CONTROL EROSION. QUICK WAY TO ESTABLISH VEGETATION FILTER STRIP. CAN BE USED ON STEEP SLOPES OR IN DRAINAGEWAYS WHERE SEEDING MAY BE DIFFICULT.	X	X
NON-VEGETATIVE SOIL COVER	GROUND COVER	X	PROVIDES GROUND COVER, SHRUBS AND TREES IN ADDITION TO PERMANENT VEGETATION, MAY BE USED AS PART OF A FINAL LANDSCAPE PLAN ALONG WITH SHRUBS AND TREES.		X
	MULCHING		ADDED INSURANCE OF A SUCCESSFUL, TEMPORARY PERMANENT SEEDING. CONTROLS UNWANTED VEGETATION CANNOT BE ESTABLISHED.	X	X
DIVERSIONS	AGGREGATE COVER		PROVIDES SOIL COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.	X	X
	PAVING		PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.	X	X
	RIDGE DIVERSION		TYPICALLY USED ABOVE SLOPES. USED WHERE AN EXCESS OF SOIL IS AVAILABLE.	X	X
WATERWAYS	CHANNEL DIVERSION		TYPICALLY USED AT TOP OR BASE OF SLOPES. USED WHEN EXCESS SOIL IS NOT AVAILABLE.	X	X
	COMBINATION DIVERSION		TYPICALLY USED ANYWHERE ON A SLOPE. SOIL TAKEN OUT OF CHANNEL USED TO THE RIDGE.	X	X
	CURB & GUTTER		SPECIAL CASE OF DIVERSION USED IN CONJUNCTION WITH A STREET TO DIVERT WATER FROM AN AREA REQUIRING PROTECTION.		X
ENCLOSED DRAINAGE	BENCHES		SPECIAL CASE OF DIVERSION CONSTRUCTED WHEN WORKING ON SLOPES TO SHORTEN LENGTH OF SLOPE AND ADD SLOPE STABILITY.	X	X
	BARE CHANNEL		PROVIDES MEANS OF CONVEYING RUNOFF TO DESIRED LOCATION. MAY BE USED TO DRAIN DEPRESSIONAL AREAS. ONLY APPLICABLE WHEN VELOCITY OF FLOW IS VERY LOW.	X	X
SPILLWAYS	VEGETATIVE CHANNEL		PROVIDES ADDED STABILITY TO CHANNEL. USED WHEN VELOCITY OF FLOW IS NOT EXTREMELY FAST.	X	X
	LINED CHANNEL		USED WHEN VEGETATION WILL NOT PROTECT THE CHANNEL AGAINST HIGH VELOCITIES OF FLOW OR WHERE VEGETATION CANNOT BE ESTABLISHED.	X	X
OUTLETS	STORM SEWER	X	CAN BE USED TO CONVERT STORMWATER TO SEEDING BASIN OR IN CONJUNCTION WITH A WATERWAY.		X
	UNDERDRAIN		USED TO LOWER WATER TABLE AND INTERCEPT GROUNDWATER FOR BETTER VEGETATION GROWTH AND SLOPE STABILITY. USED TO CARRY BASE FLOW IN WATERWAYS AND TO DRAIN SEDIMENT BASINS.	X	X
SEDIMENT BASINS	STRAIGHT PIPE SPILLWAY		USED FOR RELATIVELY SMALL VERTICAL DROPS AND SMALL FLOWS OF WATER.		X
	DROP INLET PIPE SPILLWAY		SAME AS PIPE SPILLWAY EXCEPT LARGER FLOWS AND LARGE VERTICAL DROPS CAN BE ACCOMMODATED.	X	X
	WEIR SPILLWAY	X	USED FOR RELATIVELY SMALL VERTICAL DROPS AND FLOWS MUCH GREATER THAN PIPE STRUCTURES.	X	X
SEDIMENT FILTERS	BOX INLET WEIR SPILLWAY		SAME AS WEIR SPILLWAY EXCEPT LARGER FLOWS CAN BE ACCOMMODATED BECAUSE OF LOWER WEIR LENGTH.	X	X
	LINED APRON	X	PREVENTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM LOWER SLOPES.	X	X
MUD AND DUST CONTROL	EMBANKMENT SEDIMENT BASIN		USED WHERE TOPOGRAPHY LENDS ITSELF TO CONSTRUCTING A DAM AND EARTH FILL IS AVAILABLE.	X	X
	EXCAVATED SEDIMENT BASIN		USED WHERE EMBANKMENT COULD CAUSE A HAZARD DOWNSTREAM IN CASE OF FAILURE.	X	X
MUD AND DUST CONTROL	COMBINATION SEDIMENT BASIN		USED WHEN TOPOGRAPHY IS SUITABLE BUT ADDITIONAL CAPACITY IS NEEDED.	X	X
	BARRIER FILTER		USED FOR SINGLE LOTS OR DRAINAGE AREAS LESS THAN 1/2 ACRE TO FILTER SEDIMENT RUNOFF.	X	X
MUD AND DUST CONTROL	VEGETATIVE FILTER	X	USED ALONG DRAINAGEWAYS OR PROPERTY LINES TO FILTER SEDIMENT FROM RUNOFF. SIZE MUST BE INCREASED IN PROPORTION TO DRAINAGE AREA.	X	X
	STABILIZED CONST. ENTRANCE	X	PREVENT MUD FROM PICKED UP AND CARRIED OFF-SITE.	X	X
MUD AND DUST CONTROL	DUST & TRAFFIC CONTROL	X	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.	X	X

NOTES:

1) SITE DESCRIPTION:

A. THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY:

THE PROPOSED ACTIVITY CONSISTS OF DEVELOPING APPROXIMATELY 2.527 ACRES WITH A PROPOSED INDUSTRIAL USE BUILDING, IMPROVEMENTS TO INCLUDE PARKING, STORM SEWERS, SANITARY SEWERS, WATER MAIN AND STORM WATER DETENTION CONSTRUCTION.

B. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE, SUCH AS GRUBBING, EXCAVATION, AND GRADING:

THE SEQUENCE OF THE CONSTRUCTION ACTIVITIES MAY BE AS FOLLOWS: 1) INSTALL SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCE, 2) GRADING, 3) UNDERGROUND UTILITIES INSTALLATION, 4) FINE GRADING IN PAVEMENT AREAS AND 5) PAVEMENT CONSTRUCTION.

THE SOIL EROSION AND SEDIMENTATION CONTROL ITEMS SHALL BE CONSTRUCTED AS NEEDED DURING THE ABOVE CONSTRUCTION ACTIVITIES.

C. THE TOTAL AREA OF THE CONSTRUCTION IS ESTIMATED TO BE 2.62 ACRES. THE TOTAL AREA OF THE SITE THAT IS ESTIMATED TO BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES, IS 2.62 ACRES.

D. THE ESTIMATED RUNOFF COEFFICIENTS OF THE VARIOUS AREAS OF THE SITE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED ARE CONTAINED IN THE PROPOSED DRAINAGE STUDY, PREPARED BY KDC CONSULTANTS INC., WHICH IS HEREBY INCORPORATED BY REFERENCE IN THIS PLAN.

E. SOIL BORINGS NOT PROVIDED.

2. CONTROLS:

THIS SECTION OF THE PLAN ADDRESSES THE VARIOUS WATERSHEDS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED IN 1B ABOVE. FOR EACH MEASURE DISCUSSED, THE CONTRACTORS WILL BE RESPONSIBLE FOR ITS IMPLEMENTATION AS INDICATED. EACH SUCH CONTRACTOR SHALL SIGN THE REQUIRED CERTIFICATION ON FORMS WHICH ARE ATTACHED TO, AND/OR ARE A PART OF THIS PLAN.

A. EROSION AND SEDIMENT CONTROLS:

(i) STABILIZATION PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF INTERIM AND PERMANENT STABILIZATION PRACTICES, INCLUDING SITE-SPECIFIC SCHEDULING OF THE IMPLEMENTATION OF THE PRACTICES. SITE PLANS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. EXCEPT AS PROVIDED IN 2A(II) AND 2B, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL NO OCCUR FOR A PERIOD OF 21 OR MORE CALENDAR DAYS.

A. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE THEREAFTER.

THE FOLLOWING INTERIM AND PERMANENT STABILIZATION PRACTICES, AS MINIMUM, WILL BE IMPLEMENTED TO STABILIZE THE DISTURBED AREA OF THE SITE:

1. PERMANENT SEEDING
2. SILT FILTER FENCE
3. STABILIZED CONSTRUCTION ENTRANCE
4. BARRIER FILTER

(ii) STRUCTURAL PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF STRUCTURAL PRACTICES THAT WILL BE IMPLEMENTED, TO THE DEGREE ATTAINABLE, TO DIVERT FLOWS TO UNEXPOSED SOIL OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT:

1. RETENTION/DETENTION PONDS
2. STORM SEWER SYSTEM
3. VEGETATED DRAINAGE SWALES
4. PERMANENT SEEDING.

B. STORM WATER MANAGEMENT:

(i) PROVIDED BELOW IS A DESCRIPTION OF MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN ASSOCIATION WITH THE CONSTRUCTION OF THE PROJECT. THESE MEASURES OPERATIONS HAVE BEEN COMPLETED. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT.

THE PRACTICES SELECTION FOR IMPLEMENTATION ON THE BASIS OF THE TECHNICAL GUIDANCE CONTAINED IN EPA'S STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL, AND OTHER ORDINANCES LISTED IN THE SPECIFICATIONS.

THE STORM WATER POLLUTANT CONTROL MEASURES SHALL INCLUDE:

1. SILT FILTER FENCE
2. DRAINAGE SWALES
3. STORM SEWERS
4. RETENTION/DETENTION PONDS.

(ii) VELOCITY DISSIPATION DEVICES WILL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNELS NECESSARY TO PROVIDE A NON-EROSIVE VELOCITY FLOW FROM THE STRUCTURE TO A WATER COURSE, SO THAT THE NATURAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS ARE MAINTAINED AND PROTECTED (E.G., MAINTENANCE OF HYDROLOGIC CONDITIONS, SUCH AS THE HYDROPERIOD AND HYDRODYNAMICS PRESENT PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES).

STORM WATER MANAGEMENT CONTROL INCLUDES:

1. VEGETATED CHANNELS
2. STRAW BALES FOR INLET PROTECTION

C. OTHER CONTROLS:

(i) WASTE DISPOSAL: THE SOLID WASTE MATERIALS INCLUDING TRASH, CONSTRUCTION DEBRIS, EXCESS CONSTRUCTION MATERIALS, MACHINERY, TOOLS AND OTHER ITEMS WILL BE COLLECTED AND DISPOSED OFF-SITE BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO ACQUIRE ANY PERMIT REQUIRED FOR SUCH DISPOSAL. BURNING ON THE SITE WILL NOT BE PERMITTED. NO SOLID MATERIALS INCLUDING BUILDING MATERIALS SHALL BE DISCHARGED INTO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

(ii) THE PROVISIONS OF THIS PLAN SHALL ENSURE AND DEMONSTRATE COMPLIANCE WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.

THE SANITARY SEWAGE WILL BE DISCHARGED TO THE PROPOSED SANITARY SEWER CONSTRUCTED PER IEPA AND LOCAL STANDARDS.

D. APPROVED STATE OR LOCAL PLANS:

THE MANAGEMENT PRACTICES, CONTROLS AND OTHER PROVISIONS CONTAINED IN THIS PLAN ARE AT LEAST AS PROTECTIVE AS THE REQUIREMENTS CONTAINED IN THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL DATED OCTOBER 1987, ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION PLAN, AND THE MUNICIPAL SUBDIVISION ORDINANCE. REQUIREMENTS SPECIFIED IN SEDIMENT AND EROSION CONTROL SITE PLANS OR SITE PERMITS OR STORM WATER MANAGEMENT SITE PLANS OR SITE PERMITS APPROVED BY LOCAL OFFICIALS THAT ARE APPLICABLE TO PROTECTING SURFACE WATER RESOURCES ARE UPON SUBMITTAL OF AN NOI TO BE AUTHORIZED TO DISCHARGE UNDER THIS PERMIT, INCORPORATED BY REFERENCE AND ARE ENFORCEABLE UNDER THIS PERMIT EVEN IF THEY ARE NOT SPECIFICALLY INCLUDED IN THE PLAN.

3. MAINTENANCE:

THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT WILL BE USED TO MAINTAIN IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN AND STANDARD SPECIFICATIONS:

A. STABILIZED CONSTRUCTION ENTRANCE: THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC STREETS. THIS WILL BE DONE BY TOP DRESSING WITH ADDITIONAL STONES, REMOVE AND REPLACE TOP LAYER OF STONES OR WASHING THE ENTRANCE. THE VEGETATIVE COVER SHALL BE REMOVED IMMEDIATELY.

B. VEGETATIVE EROSION CONTROL MEASURES: THE VEGETATIVE GROWTH OF TEMPORARY AND PERMANENT SEEDING, SODDING, VEGETATIVE CHANNELS, VEGETATIVE FILTER, ETC. SHALL BE MAINTAINED PERIODICALLY AND SUPPLY ADEQUATE WATERING AND FERTILIZER. THE VEGETATIVE COVER SHALL BE REMOVED AND RESEED AS NECESSARY.

C. SEDIMENTATION BASINS/TRAPS: THE SEDIMENTS SHALL BE REMOVED WHEN 40-50 PERCENT OF THE TOTAL ORIGINAL CAPACITY IS OCCUPIED BY THE SEDIMENT. IN NO CASE SHALL THE SEDIMENT BE BUILT UP TO MORE THAN 1 FOOT BELOW THE CREST ELEVATION. AT THIS STAGE THE BASIN SHALL BE CLEANED OUT TO RESTORE ITS ORIGINAL VOLUME.

D. SILT FILTER FENCE: THE DAMAGED SILT FILTER FENCE SHALL BE RESTORED TO MEET THE STANDARDS OR REMOVED AND REPLACED AS NEEDED.

E. STRAW BALE BARRIER FILTERS: THE STRAW BALE BARRIER FILTER SHALL BE INSPECTED FREQUENTLY AND SHALL BE REPAIRED OR REMOVED AND REPLACED AS NEEDED.

F. RIP-RAP OUTLET PROTECTION: IT SHALL BE INSPECTED AFTER HIGH FLOWS FOR ANY SCOUR BENEATH THE RIP-RAP OR FOR STONES THAT HAVE BEEN DISLODGED. IT SHALL BE REPAIRED IMMEDIATELY.

4. INSPECTIONS:

THE OWNER, OR OWNER'S REPRESENTATIVE SHALL PROVIDE QUALIFIED PERSONNEL TO INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATION WHERE VEHICLES ENTER OR EXIT THE SITE. SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL.

A. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF SITE SEDIMENT TRACKING.

B. BASED ON THE RESULTS OF THE INSPECTION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED IN SECTION 1 ABOVE AND POLLUTION PREVENTION MEASURES IDENTIFIED IN SECTION 2 ABOVE SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER SUCH INSPECTION. ANY CHANGES TO THIS PLAN RESULTING FROM THE REQUIRED INSPECTIONS SHALL BE IMPLEMENTED WITHIN 7 DAYS FOLLOWING THE INSPECTION.

C. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTIONS, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH SECTION 4B SHALL BE MADE AND RETAINED AS PART OF THE PLAN FOR AT LEAST THREE (3) YEARS AFTER THE DATE OF THE INSPECTION. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI.G OF THE GENERAL PERMIT.

A COPY OF THE WRITTEN EROSION CONTROL INSPECTION REPORT SHALL BE RETAINED ON SITE AND A COPY SHALL BE DELIVERED TO THE CITY OF WARRENVILLE COMMUNITY DEVELOPMENT DEPARTMENT.

D. IF ANY VIOLATION OF THE PROVISIONS OF THIS PLAN IS IDENTIFIED DURING THE CONDUCT OF THE CONSTRUCTION WORK COVERED BY THIS PLAN, THE RESIDENT ENGINEER OR RESIDENT TECHNICIAN SHALL COMPLETE AND FILE AN INCIDENT OF NONCOMPLIANCE (ION) REPORT FOR THE IDENTIFIED VIOLATION. THE RESIDENT ENGINEER OR RESIDENT TECHNICIAN SHALL USE FORMS PROVIDED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND SHALL INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE. THE REPORT OF NONCOMPLIANCE SHALL BE SIGNED BY A PERMISSIBLE AUTHORITY IN ACCORDANCE WITH PART VI.G OF THE GENERAL PERMIT. THE REPORT OF NONCOMPLIANCE SHALL BE MAILED TO THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY: DIVISION OF WATER POLLUTION CONTROL
 ATTN: COMPLIANCE ASSURANCE SECTION
 2200 CHURCHILL ROAD
 P.O. BOX 19276
 SPRINGFIELD, IL 62794-9276

5. NON-STORM WATER DISCHARGES:

EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORMWATER THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ASSOCIATED WITH THE RESIDENTIAL ACTIVITY DESCRIBED IN THIS PLAN, ARE DESCRIBED AS:

1. WATER MAIN FLUSHING
2. FIRE HYDRANT FLUSHING
3. WATERING FOR DUST CONTROL
4. IRRIGATION DRAINAGE FOR VEGETATIVE GROWTH FOR SEEDING, ETC..

THE POLLUTION PREVENTION MEASURES, AS DESCRIBED BELOW WILL BE IMPLEMENTED FOR NON-STORMWATER COMPONENTS OF THE DISCHARGE. THE FIRE HYDRANT AND WATER MAIN SHALL NOT BE FLUSHED DIRECTLY ON THE EXPOSED AREA OR SUBGRADE OF THE PAVEMENT. HOSES SHALL BE USED TO DIRECT THE FLOW INTO THE STORM SEWER SYSTEM.

THE EROSION DUE TO IRRIGATION OF SEEDING SHALL BE CONSIDERED MINOR.

CONTRACTOR CERTIFICATION STATEMENT:

THIS CERTIFICATION STATEMENT IS A PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THE PROJECT DESCRIBED BELOW. IN ACCORDANCE WITH THE TERMS OF THIS PERMIT, ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY, I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE _____ DATE _____

TITLE _____

NAME OF FIRM _____

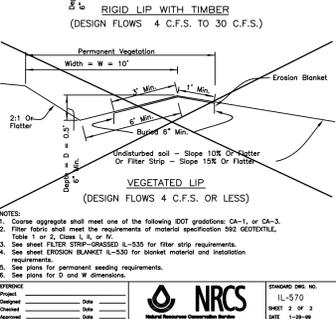
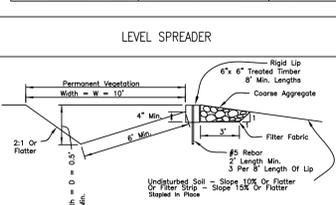
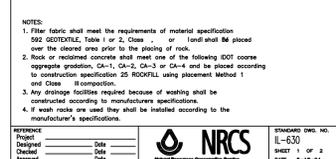
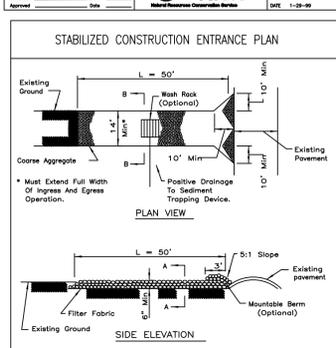
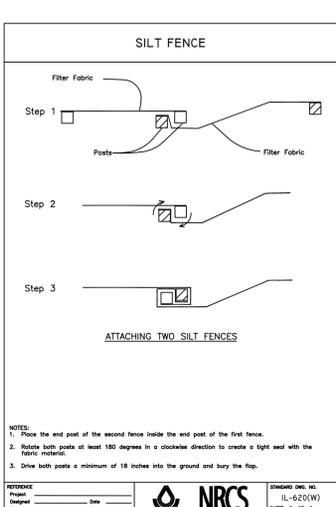
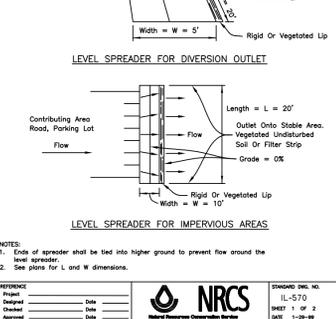
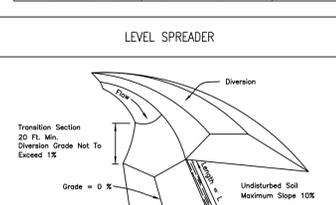
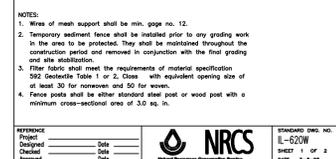
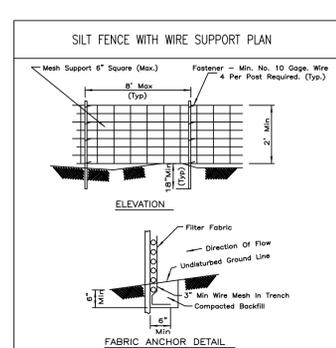
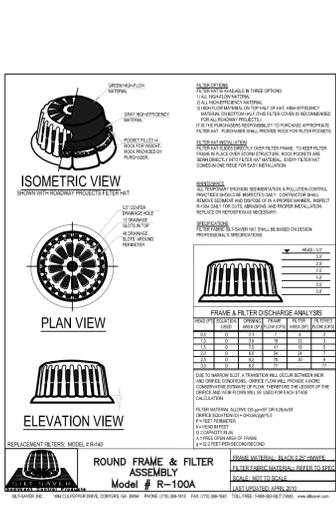
STREET ADDRESS _____

CITY _____ STATE _____

ZIP CODE _____

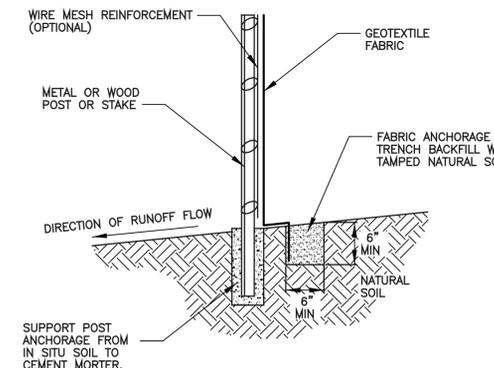
PHONE NUMBER _____

THE PERMITTEE (CONTRACTOR) SHALL SUBMIT A "NOTICE OF TERMINATION (NOT)" TO THE AGENCY AFTER THE LAND DISTURBING ACTIVITIES ARE COMPLETED AND THE SITE HAS BEEN FINALLY STABILIZED. USEPA CONSIDERS THAT A SITE HAS BEEN FINALLY STABILIZED WHEN ALL LAND DISTURBING ACTIVITIES ARE COMPLETED, UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN ESTABLISHED OR EQUIVALENT PERMANENT STABILIZATION MEASURES HAVE BEEN USED.



STABILIZATION TYPE	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A			*	*					
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C				D					
SODDING			E**									
MULCHING			F									

- A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED W/PERENNIAL RYEGRASS 30 LBS/ACRE.
- B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED W/PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STAW MULCH/ACRE.
- C. SPRING OATS 100 LBS/ACRE.
- D. WHEAT OR CEREAL RYE 150 LBS/ACRE.
- E. SOO
- F. STRAW MULCH 2 TONS/ACRE.
- * IRRIGATION NEEDED DURING JUNE & JULY.
- ** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOO.
- *** MOW LAWNS AS NECESSARY



NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH W/ HDG RINGS, STEEL POSTS W/ TIRES, WOOD POSTS W/ NAILS.

SILT FENCE DETAIL

ENGINEERED BY:	KDC CONSULTANTS INC.
WWW.KDCCONSULTANTSINC.COM	
18144 S. BELL ROAD	
HOMER GLEN, ILLINOIS 60491	
(708) 645-0545	

ENGINEERED BY:	WVILLE TALBOT
EROSION CONTROL PLAN	

PROJECT	20-04-036-ENG
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DATE:	JULY 7, 2025
REVISION	DATE
ORIGINAL	08/20/21
CITY COMMENTS	11/30/21
CITY COMMENTS	07/07/25

GENERAL NOTES

- AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF ALL PHASES OF WORK, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING:
CITY OF WARRENVILLE: (630) 836-3050
KDC CONSULTANTS INC.: (708) 645-0545
- THE CONTRACTOR SHALL NOTIFY J.U.L.E. (1-800-892-0123) 48 HOURS PRIOR TO ANY EXCAVATION WORK TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES.
- THE CONTRACTOR SHALL NOTIFY KDC CONSULTANTS INC. 5 WORKING DAYS PRIOR TO ANY REQUIRED CONSTRUCTION STAKING.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING DOCUMENTS:
"STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION
"STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", LATEST EDITION
"STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF WATER POLLUTION CONTROL.
"SUBDIVISION ORDINANCE FOR THE CITY OF WARRENVILLE".
- THE ENGINEER WARRANTS THE DESIGN, RECOMMENDATIONS AND SPECIFICATIONS TO HAVE BEEN PROMULGATED ON CONDITIONS GENERALLY ENCOUNTERED IN THE INDUSTRY. THE ENGINEER ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE DESIGN OR RECOMMENDATIONS AND SPECIFICATIONS, FOR COMPLEX OR UNUSUAL SOIL CONDITIONS ENCOUNTERED ON THE PROJECT. IT SHALL BE THE OWNERS/BIDDERS RESPONSIBILITY TO ASCERTAIN THE EXACT NATURE OF SUBSURFACE CONDITIONS PRIOR TO THE CONSTRUCTION OF THE IMPROVEMENT.
- THE LOCATION OF EXISTING UTILITIES, EASEMENTS, AND RIGHT OF WAYS ARE SHOWN ON THESE PLANS ACCORDING TO SURVEYS OBTAINED AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER, THIS DOES NOT PRECLUDE THE EXISTENCE OF OTHER UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND TO PROVIDE FOR THEIR PROTECTION FROM DAMAGE DURING THE CONSTRUCTION OPERATIONS. IF OTHER UTILITIES OR CONFLICTS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND BONDS FOR CONSTRUCTION ALONG OR ACROSS EXISTING ROADWAYS. THE CONTRACTOR SHALL PROVIDE PROPER BRACING, SHORING OR OTHER PROTECTION REQUIRED INCLUDING INSTALLATION AND MAINTENANCE OF ADEQUATE TRAFFIC CONTROL AND PROTECTION BEFORE CONSTRUCTION BEGINS. ALL WORK CONDUCTED WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED IN ACCORDANCE WITH APPLICABLE ARTICLES OF SECTIONS 107 & 648 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JAN. 1, 1997, AND THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO, AND THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONTRACTORS FAILURE TO PERFORM OR FURNISH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- ALL TRENCHES CAUSED BY THE CONSTRUCTION OF SEWERS, WATERMANS, WATER SERVICE PIPES AND IN EXCAVATIONS AROUND CATCH BASINS, MANHOLES, INLETS, AND OTHER APPURTENANCES WHICH OCCUR WITHIN TWO FEET OF THE LIMITS OF EXISTING AND PROPOSED PAVEMENTS, SIDEWALKS AND CURB AND GUTTERS SHALL BE BACKFILLED WITH TRENCH BACKFILL (AS DEFINED IN SECTION 208 IDOT STANDARD SPECIFICATIONS). SETTLEMENT OF THE TRENCH BACKFILL SHALL BE ACCELERATED BY MEANS OF WATER INTRODUCED THROUGH HOLES JETTED INTO BACKFILL TRENCHES TO A POINT APPROXIMATELY 2 FEET ABOVE THE TOP OF THE SEWER PIPE. THE HOLES SHALL NOT BE JETTED GREATER THAN 6 FEET APART, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE JETTING PROCESS SHALL CONFORM TO THE STANDARDS SET FORTH IN THE STATE OF ILLINOIS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
ANY DEPRESSIONS WHICH DEVELOP WITHIN THE STREET RIGHT-OF-WAY DUE TO SETTLEMENT OF TRENCH BACKFILL MATERIAL SHALL BE REFILLED AND COMPACTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC. THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, CURRENT EDITION, SHALL BE CONSULTED. APPROPRIATE CONTROL METHODS SHALL BE APPLIED TO THE SPECIFIC SITUATIONS AND TYPES OF CONSTRUCTION OPERATIONS BEING PERFORMED.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING THE MOST RECENT SET OF THE "APPROVED" FINAL ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.
- NO HOLES ARE TO BE LEFT OPEN IN THE PAVEMENT OR PARKWAY OVER A HOLIDAY, WEEKEND, OR AFTER 3 P.M. ON THE DAY PRECEDING A HOLIDAY OR A WEEKEND.
- CONTRACTOR SHALL RESTORE OFF-SITE SURFACES TO ORIGINAL CONDITION IF DAMAGED BY CONSTRUCTION. ANY EXISTING CURB, PAVEMENT OR SIDEWALK DISTURBED DURING THE CONSTRUCTION PROCESS IS TO BE REPLACED TO THE FINE GRADED AND SEEDED. ALL EXCESS TRENCH MATERIAL IS TO BE REMOVED FROM THE SITE. THE COST OF SAID REPLACEMENT AND REMOVAL SHALL BE CONSIDERED INCIDENTAL TO THE SEWER AND WATER CONTRACT.
- THE CONTRACTOR IS TO PROVIDE KDC CONSULTANTS INC. WITH RECORD DRAWINGS OF ALL UTILITIES SHOWING LOCATIONS OF ALL SEWER PIPE, MAINS, SERVICE STUBS AND STRUCTURES.
- ALL TOP OF FRAMES OF STORM AND SANITARY MANHOLES AND CATCH BASINS, AND ALL WATER VALVE VAULTS AND BOXES SHALL BE ADJUSTED TO MEET FINAL FINISH GRADE BY THE SEWER AND WATER CONTRACTOR AS REQUIRED WHEN CURB AND GUTTER AND PAVING IS BEING CONSTRUCTED. THE ADJUSTMENT COST IS TO BE CONSIDERED INCIDENTAL TO THE CONTRACT OF THE SEWER AND WATER CONTRACTOR.
- STREET SIGNS SHALL BE ERECTED AT EACH STREET INTERSECTION. THE TYPE OF SIGN AND LOCATION THEREOF SHALL BE SUBJECT TO THE APPROVAL AND DIRECTION OF THE CITY OF WARRENVILLE.
- ALL ELEVATIONS ON THESE PLANS ARE U.S.G.S. DATUM.
- NO EXTRA WORK OF ANY NATURE SHALL BE UNDERTAKEN WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER OR HIS REPRESENTATIVE.
- THE GENERAL CONTRACTOR IS TO VERIFY THE LOCATION OF ALL STUDS IN THE FIELD. IF THERE ARE ANY DISCREPANCIES, NOTIFY THE DESIGN ENGINEER AT ONCE. NO WORK SHALL BE STARTED UNTIL THE DISCREPANCIES ARE SOLVED.

CONSTRUCTION SCHEDULE:

A. EROSION CONTROL	2 MONTHS
B. STRIPPING & CLEARING OF SITE	2 MONTHS
C. ROUGH GRADING & CONSTRUCTION	3 MONTHS
D. TOP OF FOUNDATION AS-BUILT	SPRING/2022
E. FINAL GRADING & LANDSCAPING & REMOVE TEMPORARY FENCING	FALL/2022

SOIL EROSION CONTROL PLAN:

- THE ENTIRE SITE SHALL BE GRADED SO THAT NO STORM WATER RUNOFF AND LIKEWISE SOIL SEDIMENT CAN FLOW UNRESTRICTED FROM THE SITE.
- DURING CONSTRUCTION A TEMPORARY EARTH BERM OR SILT FENCE SHALL BE PROVIDED ALONG THE PROPERTY LINES WHERE UNRESTRICTED RUNOFF OCCURS NATURALLY OR IS CREATED BY EXCAVATION. IF FENCING IS USED, THE CONDITION OF THE FENCE SHALL BE CHECKED AT MINIMUM EVERY OTHER WEEK, OR AFTER EVERY RAINSTORM THAT MIGHT PRODUCE RUNOFF. DAMAGED OR DETERIORATED ITEMS SHALL BE REPLACED AND MAINTAINED IN AN EFFECTIVE CONDITION.
- ANY EXCESS TOPSOIL THAT IS TO BE STOCKPILED FOR A PERIOD LONGER THAN 3 WEEKS SHALL BE PROTECTED BY EXCAVATING A TRENCH COMPLETELY AROUND THE STOCKPILE TO PREVENT THE ESCAPE OF SOIL MATERIAL THROUGH STORM WATER RUNOFF. STOCKPILES THAT ARE TO REMAIN LONGER THAN TWO (2) MONTHS SHALL BE SEEDED WITH AN APPROPRIATE GROUND COVER.
- SILT FENCING CAN REMAIN IN PLACE THROUGH THE CONSTRUCTION OF THE HOUSES TO SERVE AS EROSION CONTROL FOR THAT CONSTRUCTION.
- AS EACH PHASE ON THE ENTIRE SITE IS COMPLETED THE ENTIRE AREA SHALL EITHER BE SODDED OR SEEDED AFTER SEDIMENT HAS BEEN REDISTRIBUTED. IF WEATHER CONDITIONS ARE SUCH THAT SEEDING WOULD NOT BE EFFECTIVE, THEN THE STOCK PILES SHOULD BE EITHER MULCHED OR COVERED AND GRADED SO THAT ALL SEDIMENT FROM EROSION WILL BE CONFINED WITHIN THE BOUNDARIES OF THIS SITE.
- SEEDING WILL BE DONE PER "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", OCT. 1987, ILLINOIS DEPARTMENT OF ENVIRONMENTAL PROTECTION AGENCY DIVISION OF WATER POLLUTION CONTROL.
- TO PREVENT SOIL FROM LEAVING THE SITE ON CONSTRUCTION VEHICLE WHEELS, WORK ENTRANCES SHALL BE CONSTRUCTED OF GRAVEL AND SHALL EXTEND AT LEAST 100 FEET INTO THE JOB SITE. THE EXISTING PAVEMENT SURFACES SHALL BE INSPECTED DAILY FOR SOIL DEBRIS AND SHALL BE CLEANED WHEN NECESSARY.
- DISPOSAL OF DEBRIS EXCAVATION AND PAVEMENT REMOVAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND CONSIDERED AS AN INCIDENTAL EXPENSE.
- "SILT SAVERS" ARE REQUIRED FOR ALL STORM STRUCTURES.

PAVEMENT, SIDEWALK AND CURB & GUTTER

- PAVEMENT THICKNESS SHALL COMPLY WITH THE CITY OF WARRENVILLE REQUIREMENTS.
- SIDEWALK SHALL BE 6" PORTLAND CEMENT CONCRETE ON 4" CA-6 BEDDING, 5 FEET WIDE, AND INSTALLED 1 FOOT OFF OF THE RIGHT OF WAY LINE, WITHIN THE PUBLIC RIGHT OF WAY. THE THICKNESS OF THE CONCRETE SHALL BE INCREASED TO 7" WHERE THE SIDEWALK CROSSES A DRIVEWAY.
WITHIN THE CITY OF WARRENVILLE RIGHT OF WAY, FIBERIZED CONCRETE SHALL BE CLASS SI WITH A MINIMUM 6.1 BAG MIX, IN ACCORDANCE WITH SECTION 1020 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND ASTM C-1116, AND SHALL INCLUDE FIBROUS REINFORCEMENT. FIBROUS REINFORCEMENT IS ONE HALF INCH (1/2") LENGTH SYNTHETIC FIBER, ADDED AT A RATE OF 1.5 POUNDS PER CUBIC YARD OF CONCRETE.
- HANDICAPPED RAMPS AND DEPRESSIONED CURBS SHALL BE PROVIDED WHEREVER SIDEWALK INTERSECTS CURB IN ACCORDANCE WITH IDOT SPECIFICATIONS.
- EXPANSION JOINTS SHALL BE PLACED, AS A MINIMUM, AT ALL CURB RADIUS POINTS AND ALL CONSTRUCTION JOINTS, AND SHALL CONSIST OF 3/4 INCH THICK PREFORMED EXPANSION JOINT FILLER AND DOWELS WITH END CAPS.
- CONSTRUCTION JOINTS SHALL BE SAWCUT AT 20 FOOT MAXIMUM INTERVALS TO A DEPTH OF 2 INCHES. JOINT SPACES SHALL BE SEALED WITH A COLD POUR JOINT COMPOUND. CONCRETE CURING COMPOUND SHALL BE APPLIED AS FINISHING WORK PROCEEDS.
- THE CONTRACTOR SHALL BACKFILL CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO PLACEMENT OF BASE COURSE MATERIALS. THE CURB IS TO BE SAWCUT WITHIN 24 HOURS AFTER PLACEMENT. GUTTERS SHALL BE REVERSED WHERE APPROPRIATE FOR DRAINAGE. CURB CONSTRUCTED OVER A UTILITY TRENCH SHALL BE TRENCH BACKFILLED.
- ALL CURBS CONSTRUCTED OVER A UTILITY TRENCH SHALL BE REINFORCED WITH TWO #4 REBARS FOR A LENGTH OF 20 FEET CENTERED OVER THE TRENCH. SIDEWALKS SHALL BE TREATED IN THE SAME MANNER USING THREE #6 REBARS.
- PRIOR TO PLACING ANY PAVEMENT MATERIAL, THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY PREPARING AND COMPACTING THE SUBGRADE. BOTH THE CURB & GUTTER AND PAVEMENT BASE COURSE SHALL BE PROOF ROLLED WITH A FULLY LOADED DUMP TRUCK. THE ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE PROOF ROLLING. ADDITIONAL PROOF ROLLS MAY BE NECESSARY TO VERIFY THAT ANY UNSTABLE AREAS HAVE BEEN REPAIRED. NO PAVEMENT MATERIAL IS TO BE PLACED ON WET OR SOFT SUBGRADE.
- ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT TO A NEAT EDGE ALONG LIMITS OF PROPOSED REMOVAL BEFORE REMOVAL OPERATION BEGINS.

SITE GRADING

- SITE DRAINAGE: THE ROUGH GRADING OPERATIONS, THE CONSTRUCTION OF EMBANKMENTS, AND STOCKPILING SHALL NOT CAUSE PONDING OF STORM WATER. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
- ELEVATION REQUIREMENTS: PROPOSED STREETS SHALL BE EXCAVATED OR FILLED TO A GRADED SUB-GRADE AS SHOWN ON THE TYPICAL STREET SECTION FOR THE PAVEMENT THICKNESS TO BE USED WITH A TOLERANCE OF + OR - 0.1 FOOT. THE SUB-GRADE FOR THE PARKWAY, INCLUDING THE PUBLIC WALKS (IF INCLUDED), AND THE DETENTION AREA INCLUDING PAVED INVERTS (IF INCLUDED), SHALL BE GRADED TO + OR - 0.1 FOOT OF THE SPECIFIED ELEVATION. BUILDING PADS SHALL BE GRADED AS INDICATED BY THE IMPROVEMENT PLANS WITH A TOLERANCE OF + OR - 0.1 FOOT. WHENEVER A TOLERANCE IS SPECIFIED IT SHALL BE CONSTRUED TO MEAN THAT THE NET RESULT OF THE HIGHS AND LOWS WILL AVERAGE THE TRUE LINE AND GRADE SPECIFIED.
- POND VERIFICATION: CONTRACTOR SHALL HAVE THE DETENTION POND VOLUME VERIFIED BY AN ENGINEER OR LAND SURVEYOR PRIOR TO THE INSTALLATION OF TOPSOIL AND SEEDING/SOD. THE COST OF SAID VERIFICATION SHALL BE BORNE BY CONTRACTOR.
- EXCESS TRENCH MATERIAL: THE SUB-GRADE SHALL BE LEFT SUFFICIENTLY LOW BY THE MASS GRADING CONTRACTOR TO ALLOW FOR THE PLACEMENT OF THE TRENCH SPOIL FROM THE UNDERGROUND UTILITIES. THE UNDERGROUND CONTRACTOR SHALL LEAVE ALL EXCESS TRENCH MATERIAL OVER THE TRENCH AND LEVELLED OFF ADJACENT TO THE TRENCH. THE MASS GRADING CONTRACTOR SHALL SPREAD AND HAUL THE TRENCH SPOIL AS NECESSARY TO OBTAIN THE REQUIRED SUB-GRADE ELEVATIONS. ALL ACCEPTABLE CLAY MATERIAL FROM THE TRENCH SPOIL IS TO BE COMPACTED IN CLAY FILL AREAS AND THE EXCESS UNCLASSIFIED MATERIAL IS TO BE COMPACTED IN UNCLASSIFIED FILL AREAS.
- BALANCE OF MATERIALS: THE MASS GRADING CONTRACTOR SHALL SUB-GRADE THE LOT AREAS TO ALLOW SUFFICIENT MATERIAL FOR THE FINAL GRADING CONTRACTOR TO BALANCE THE MATERIAL FOR THE REQUIRED CUTS AND FILLS ON EACH LOT OR BETWEEN ADJACENT LOTS.
- BORROW EXCAVATION: ANY CLAY BORROW EXCAVATION REQUIRED SHALL BE OBTAINED FROM AVAILABLE REAR YARD UNDERCUTS WITHIN THE LOT AREAS. THE LOCATION OF CLAY BORROW EXCAVATIONS MUST BE APPROVED BY THE OWNER, ENGINEER, AND/OR THE SOILS ENGINEER, AND THE MATERIAL MUST BE APPROVED BY THE SOILS ENGINEER AS SUITABLE FOR STRUCTURAL FILL.

ALL BORROW AREAS ARE TO BE CROSS SECTIONED BEFORE EXCAVATION PROCEEDS AND PRIOR TO REFILLING. CONTRACTOR IS TO PROVIDE ASSISTANCE IN SAID CROSS SECTIONING AT NO COST TO THE OWNER. ALL DEWATERING OF THE BORROW AREAS IS TO BE THE MASS GRADING CONTRACTORS RESPONSIBILITY. PUMPAGE IS TO BE PROVIDED AT NO COST TO THE OWNER.
IF ANY CLEARING OR TOPSOIL STRIPPING AND STOCKPILING OF A BORROW PIT AREA IS NECESSARY, THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD.

THE BORROW PIT SHALL BE REFILLED WITH UNCLASSIFIED MATERIAL FROM THE SITE. THE MATERIAL SHALL BE PLACED IN UNIFORM LAYERS (AS HEREIN SPECIFIED) AND COMPACTED TO A MINIMUM DENSITY OF EIGHTY-FIVE (85) PER CENT OF MAXIMUM DENSITY IN ACCORDANCE WITH THE ASTM SPECIFICATIONS D1557 OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER FOR THE TYPE OF MATERIALS USED. FOLLOWING COMPLETION OF THE BORROW EXCAVATION AND EARTHMOVING OPERATIONS, THE BORROW PIT AREAS SHALL BE SHAPED TO CONFORM WITH THE GRADING PLANS.

UNSUITABLE SOIL EXCAVATION: IF CONTRACTOR ENCOUNTERS ANY UNSUITABLE OR POOR BEARING SOIL WITHIN THE PROJECT LIMITS, HE SHALL NOTIFY THE OWNER AT ONCE. ALL UNSUITABLE SOIL UNDERCUT AREAS ARE TO BE CROSS SECTIONED BEFORE EXCAVATION PROCEEDS AND PRIOR TO REFILLING. CONTRACTOR IS TO PROVIDE ASSISTANCE IN SAID CROSS SECTIONING AT NO COST TO THE OWNER.

ALL TOPSOIL AND ANY UNSUITABLE MATERIALS SHALL BE REMOVED FROM ROADWAY AREAS, BUILDING PAD AREAS, AND OTHER NECESSARY LOCATIONS AS DIRECTED BY THE SOILS ENGINEER. THE AREAS OF TOPSOIL AND UNSUITABLE UNDERCUT SHALL BE REFILLED AS NECESSARY WITH SELECT MATERIAL AS SPECIFIED FOR EMBANKMENT CONSTRUCTION AND THE PLACEMENT OF FILL MATERIAL.

ALL DEWATERING OF THE UNDERCUT AREAS IS TO BE THE MASS GRADING CONTRACTORS RESPONSIBILITY. PUMPAGE IS TO BE PROVIDED AT NO COST TO THE OWNER.

STOCKPILING: WHERE IT IS NECESSARY TO STOCKPILE EXCAVATED MATERIAL SUCH AS TOPSOIL, CLAY MATERIAL, ORGANIC MATERIAL, ETC., THE MASS GRADING CONTRACTOR SHALL STOCKPILE MATERIALS ON THE SITE AT LOCATIONS DESIGNATED BY THE OWNER AND IN ACCORDANCE WITH THE SPECIFICATIONS. EXCAVATED MATERIALS SHALL BE STOCKPILED IN SUCH A SEQUENCE SO AS TO ELIMINATE ANY REHANDLING OR DOUBLE MOVEMENTS BY THE CONTRACTOR. FAILURE TO PROPERLY SEQUENCE THE STOCKPILING OPERATIONS SHALL NOT CONSTITUTE A CLAIM FOR ADDITIONAL COMPENSATION.

PLACING FILL MATERIAL: THE SELECT FILL MATERIAL SHALL BE PLACED IN LEVEL UNIFORM LAYERS SO THAT THE COMPACTED THICKNESS IS APPROXIMATELY SIX (6) INCHES, HOWEVER, IF THE COMPACTION EQUIPMENT DEMONSTRATES THE ABILITY TO COMPACT A GREATER THICKNESS, THEN A GREATER THICKNESS MAY BE SPECIFIED. EACH LAYER SHALL BE THOROUGHLY MIXED DURING SPREADING TO INSURE UNIFORMITY.

EMBAKMENT MATERIAL SHALL BE COMPACTED TO A MINIMUM OF NINETY (90) PER CENT OF MAXIMUM DENSITY FOR PUBLIC WALKS, AND TO NINETY-FIVE (95) PER CENT OF MAXIMUM DENSITY WITHIN ROADWAY AREAS AND FOR BUILDING PADS, ALL IN ACCORDANCE WITH ASTM SPECIFICATION D1557, OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER FOR THE MATERIALS ENCOUNTERED.

ALL BUILDING PAD AREAS ARE TO BE CAPABLE OF SUPPORTING A MINIMUM BEARING PRESSURE OF 3000 PSF, OR AS REQUIRED BY LOCAL ORDINANCE.

NON-STRUCTURAL FILLS IN OPEN AREAS AND IN YARDS SHALL BE COMPACTED TO EIGHTY-FIVE (85) PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D1557, OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE SOILS ENGINEER FOR THE MATERIALS ENCOUNTERED.

BASIS OF PAYMENT: THE ROUGH GRADING IMPROVEMENTS SHALL INCLUDE, BUT ARE NOT LIMITED TO: CLEARING, STRIPPING AND STOCKPILING TOPSOIL; EXCAVATING; THE CONSTRUCTION OF EMBANKMENTS; CUTTING SWALES; COMPACTING SUB-GRADE FOR BUILDINGS, ROADWAYS, AND PUBLIC SIDEWALKS; CONSTRUCTING NON-STRUCTURAL FILLS; COMPACTING EXCESS TRENCH MATERIALS; AND PROVIDING ANY REQUIRED BORROW EXCAVATION. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICES INDICATED ON THE BID SCHEDULE.

PAYMENT FOR THE REMOVAL OF UNSUITABLE MATERIAL (EXCLUDING TOPSOIL EXCAVATION) SHALL BE BASED ON THE QUANTITIES AS FIELD MEASURED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE AS PART OF HIS BID A UNIT PRICE PER CUBIC YARD FOR THE REMOVAL OF UNSUITABLE MATERIAL. SAID UNIT PRICE SHALL INCLUDE THE COMPLETE REMOVAL OF THE MATERIAL, REPLACEMENT WITH A SUITABLE MATERIAL OBTAINED BY THE CONTRACTOR FROM A BORROW SOURCE, AND COMPACTION TO THE REQUIRED SPECIFICATION OF THE VILLAGE OF TINLEY PARK.

**STORMWATER POLLUTION PREVENTION PLAN
NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM GENERAL NOTES**

- EROSION CONTROL MEASURES TO BE UTILIZED DURING THE DEVELOPMENT OF THIS SITE INCLUDE TEMPORARY STABILIZED CONSTRUCTION ENTRANCE, SILT FENCING, PERMANENT DETENTION AREA "SILT SAVERS" (OR EQUAL) FRAMES AND FILTER ASSEMBLIES OVER ALL STORM SEWER STRUCTURES, AND SILT BASINS AND DITCH CHECKS, AS APPROPRIATE.
THE "SNOUT" AND "INFRA-RISER" ARE PRODUCTS DISTRIBUTED BY EAST JORDAN IRON WORKS, INC. (815) 740-1640.
SILT FENCE SHALL BE INSTALLED AROUND THE SITE WHERE ANY RUNOFF WOULD BE DIRECTED OFF SITE, EITHER TEMPORARILY OR PERMANENTLY.
- SEE "SOIL EROSION CONTROL PLAN" NOTES FOR ADDITIONAL REQUIREMENTS.
- THE LAST CATCH BASIN PRIOR TO THE OUTLET TO A DETENTION SYSTEM OR NATURAL WATERWAY SHALL BE EQUIPPED WITH A TRAP SUCH AS THE "SNOUT" OR APPROVED EQUAL. THE CONTRACTOR SHALL CLEAN OUT ALL SUMPS OF SUSPENDED SOLIDS AND OTHER POLLUTANTS ON A REGULAR BASIS UNTIL THE VILLAGE ACCEPTS THE IMPROVEMENTS.
- THE CONTRACTOR/DEVELOPER SHALL TAKE THE NECESSARY STEPS TO CONTROL WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY.
- THE CONTRACTOR/DEVELOPER SHALL INSPECT ALL DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND THE CONSTRUCTION ENTRANCE AT LEAST ONCE EVERY CALENDAR DAYS & WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OF RAIN OR GREATER OR AN EQUIVALENT SNOWFALL. MAINTAIN INSPECTION RECORDS FOR 3 YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED.
- ALL CONTRACTORS AND SUBCONTRACTORS SHALL PROVIDE A CERTIFICATE STATING THAT THEY UNDERSTAND THE TERMS AND CONDITIONS OF THIS IMPROVEMENT PLAN AND ALL SEDIMENT, EROSION OR STORM WATER PLANS APPROVED BY LOCAL OFFICIALS.
- THIS EROSION CONTROL PLAN WAS PREPARED BY KDC CONSULTANTS INC., AND TO THE BEST OF OUR KNOWLEDGE COMPLIES WITH THE URBAN SOIL EROSION CONTROL AND STANDARDS IN ILLINOIS MANUAL AND GENERALLY RECOGNIZED METHODS IN USE IN THE AREA.

SANITARY SEWER

- THE MINIMUM SANITARY SERVICE SIZE SHALL BE SIX (6) INCH DIAMETER. THE SLOPE SHALL BE 1/8" PER FOOT. THE SLOPE TOWARD THE MAIN AT A MINIMUM RATE OF ONE (1) PERCENT.
- THE MINIMUM SANITARY SERVICE SIZE SHALL BE SIX (6) INCH DIAMETER. THE SLOPE SHALL BE 1/8" PER FOOT. THE SLOPE TOWARD THE MAIN AT A MINIMUM RATE OF ONE (1) PERCENT.
- THE MINIMUM SANITARY SERVICE SIZE SHALL BE SIX (6) INCH DIAMETER. THE SLOPE SHALL BE 1/8" PER FOOT. THE SLOPE TOWARD THE MAIN AT A MINIMUM RATE OF ONE (1) PERCENT.
- MANHOLES SHALL INCLUDE INTERNAL CHIMNEY SEALS. THE EXTERIOR OF ALL MANHOLES SHALL BE COATED WITH A WATERPROOFING SEALANT.
- WHENEVER A SEWER CROSSES OVER A WATERMAIN, THE SEWER SHALL EITHER BE ENCASED IN A WATERTIGHT CARRIER PIPE, OR HAVE JOINTS AND JOINT MATERIALS MEETING SPECIFICATIONS ASTM C-361 AND C-443, RESPECTIVELY, FOR A MINIMUM OF 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATERMAIN. A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED. THE SEWER SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING THE WATERMAIN.
- WHEREVER A 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 SEWERS AND WATERMAIN 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 ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATERMAIN, THE SEWER SHALL BE CONSTRUCTED TO WATERMAIN STANDARDS.
- EXISTING SEPTIC TANKS SHALL BE PUMPED OUT BY A LICENSED SEPTIC PUMPING CONTRACTOR. ALL EXISTING SEPTIC SYSTEMS TO BE REMOVED OR FILLED.
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
- ALL SANITARY SEWER PIPES SHALL BE TESTED IN ACCORDANCE WITH IEPA AND THE CITY OF WARRENVILLE REQUIREMENTS. ALL FLEXIBLE THERMOPLASTIC SEWER MAIN PIPE SHALL BE DEFLECTION TESTED BY PULLING A MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. DEFLECTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE IEPA STANDARD SPECIFICATIONS. COST OF TESTING, UNTIL APPROVED BY THE CITY, SHALL BE INCLUDED IN THE UNIT PRICE.
- SANITARY MANHOLES SHALL BE INSPECTED AND LEAKAGE TESTED FOR WATER TIGHTNESS IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE PRESSURE (VACUUM) TEST", OR IN ACCORDANCE WITH ASTM C969.

STORM SEWER

- ALL REINFORCED CONCRETE PIPE (RCP) LESS THAN 42" SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C-76 CLASS IV; SIZE 42" RCP AND GREATER SHALL MEET OR EXCEED CLASS III; DUCTILE IRON PIPE WHERE REQUIRED SHALL MEET OR EXCEED THE PERFORMANCE REQUIREMENTS OF ASA A21.51, CLASS 52 CEMENT-LINED CORRUGATED PVC PIPE SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F-800 AND D-2931 WHEN SEWER DEPTHS ARE GREATER THAN 3 AND LESS THAN 10 FEET, CLASS IV RCP MAYBE SUBSTITUTED WITH CLASS II RCP AS SPECIFIED BY I.D.O.T.
- SEWER PIPE JOINTS SHALL BE BELL AND SPIGOT TYPE WITH U-RING GASKET FOR RCP AND SHALL BE PUSH-ON (BELL-TITE) FOR DUCTILE IRON PIPE.
- STORM SEWER MANHOLE JOINTS SHALL BE SEALED WITH PORTLAND CEMENT MORTAR, "O" RING GASKETS, OR MASTIC MATERIAL.
- MANHOLE STEPS SHALL BE SIXTEEN (16) INCHES ON CENTER, CAST IN PLACE, E.I.L.W. 8518, OR STEEL REINFORCED PLASTIC CONFORMING TO O.S.H.A. STANDARDS.
- INLETS SHALL BE TWENTY-FOUR (24) INCH DIAMETER PRECAST REINFORCED CONCRETE CONFORMING ASTM C-478.
- RIM GRADES IN CURB AND GUTTER ARE EDGE OF PAVEMENT ELEVATIONS.
- ALL EXISTING FIELD TILE AND/OR DRAIN PIPES ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. IF THIS CANNOT BE ACCOMPLISHED THEN IT SHALL BE REPAIRED WITH A NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND GRADE AND PUT INTO AN ACCEPTABLE OPERATION CONDITION. A RECORD OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE ENGINEER ON COMPLETION OF THE PROJECT. THE COST OF THIS WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.
- ALL FOOTING DRAINS, DOWNSPOUTS AND SUMP PUMPS SHALL DISCHARGE TO THE STORM SYSTEM OR OVER GROUND.
- WHERE A STORM SEWER CONNECTS TO A FLARED END SECTION, THE LENGTH OF PIPE DENOTED DOES NOT INCLUDE THE LENGTH OF THE FLARED END SECTION.
- PROVIDE GRATES OVER OPEN ENDS OF ALL FLARED END SECTIONS.

WATERMAIN

- WATER SYSTEM CONSTRUCTION SHALL, IN ALL RESPECTS, BE IN ACCORDANCE WITH THE REGULATIONS OF THE ENVIRONMENTAL PROTECTION AGENCY OF THE STATE OF ILLINOIS. NO CONSTRUCTION SHALL OCCUR WITHOUT THE OBTAINING OF A COPY OF A PERMIT FROM SAID AGENCY IS ON FILE WITH THE ENGINEER.
- WATERMAIN BEDDING SHALL BE 4" COURSE AGGREGATE, IDOT GRADATION CA-7 (3/4 INCH STONE) THE BEDDING STONE SHALL BE EXTENDED TO THE SPRING LINE OF THE PIPE.
- WHENEVER A SEWER CROSSES OVER A WATERMAIN, THE SEWER SHALL EITHER BE ENCASED IN A WATERTIGHT CARRIER PIPE, OR HAVE JOINTS AND JOINT MATERIALS MEETING SPECIFICATIONS ASTM C-361 AND C-443, RESPECTIVELY, FOR A MINIMUM OF 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATERMAIN. A VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED. THE SEWER SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING THE WATERMAIN.
- HORIZONTAL SEPARATION:
A) A WATERMAIN SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED STORM OR SANITARY SEWER LINE.
B) SHOULD LOCAL CONDITIONS PREVAIL WHICH WOULD PREVENT A LATERAL SEPARATION OF TEN (10) FEET, A WATERMAIN MAY BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER AND AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATERMAIN IS AT LEAST EIGHTEEN INCHES ABOVE THE TOP OF THE SEWER. IN SUCH CASES, WATERMAIN SHALL BE LAID WITH AS MUCH HORIZONTAL CLEARANCE FROM THE SEWER AS POSSIBLE.
C) IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED IN SUBSECTIONS (A) OR (B) ABOVE, BOTH THE WATERMAIN AND THE LENGTH OF SEWER BETWEEN ADJACENT MANHOLES SHALL BE CONSTRUCTED OF PUSH-ON OR MECHANICAL JOINT DUCTILE IRON PIPE, OR PRESTRESSED CONCRETE PIPE, AND SHALL BE PRESSURE-TESTED TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.
- VERTICAL SEPARATION:
A) WHENEVER A WATERMAIN MUST CROSS HOUSE SEWERS, STORM DRAINS OR SANITARY SEWERS, THE WATERMAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATERMAIN IS EIGHTEEN (18) INCHES ABOVE THE TOP OF THE DRAIN OR SEWER. THIS VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN (10) FEET, HORIZONTALLY, OF ANY SEWER OR DRAIN CROSSED. SAID TEN (10) FEET IS TO BE MEASURED HORIZONTALLY FROM THE WATERMAIN TO THE DRAIN OR SEWER.
B) WHERE CONDITIONS EXIST THAT THE MINIMUM VERTICAL SEPARATION SET FORTH ABOVE CANNOT BE MAINTAINED, OR IT IS NECESSARY FOR THE WATERMAIN TO PASS UNDER A SEWER OR DRAIN, ONE OF THE FOLLOWING TWO MEASURES MUST BE TAKEN:
1.) THE WATERMAIN SHALL BE INSTALLED WITHIN A PVC CARRIER PIPE AND THE CARRIER PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE HORIZONTAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.
2.) THE INVOLVED SEWER OR DRAIN SHALL BE CONSTRUCTED FROM MANHOLE TO MANHOLE WITH "O"-RING PIPE CONFORMING TO ASTM 361 OR OTHER PIPE MATERIAL WHICH WOULD CONFORM TO WATERMAIN STANDARDS, AND SHALL BE PRESSURE-TESTED TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.
- INSTALLED WATERMAIN SHALL BE PRESSURE TESTED AND CHLORINATED UNDER THE DIRECTION OF THE CITY OF WARRENVILLE UNTIL TO FINAL COST OF TESTING AND DISINFECTING, UNTIL ACCEPTABLE TO THE CITY, SHALL BE INCLUDED IN THE UNIT PRICE.
- CASTINGS SHALL BE EMBOSSED "WATER".

DATE: JULY 7, 2025		ENGINEERED BY: KDC CONSULTANTS INC. WWW.KDCCONSULTANTSINC.COM	
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CITY OF WARRENVILLE STANDARD SPECIFICATIONS
WATER MAIN, SANITARY SEWER AND STORM SEWER

WATER MAIN

- All open cut water main shall be polyvinyl chloride plastic (PVC) pressure pipe per AWWA specification C-900, Class 150 (DR-18). The above pipe and fittings shall be furnished with elastomeric gasket joints conforming to ASTM F477. Trench Backfill shall be utilized to twelve inches (12") above the top of the PVC water main.
- All water main installed by horizontal directional drilling shall be PVC per AWWA specification C-900 with CertLok joints. Assembly and installation of pipe shall be in accordance with the manufacturer's instructions. All material specifications shall be submitted to the City and approved prior to installation.
- Copper clad steel (SSC) blue tracer wire shall be installed directly over the center of the water main in the trench with a maximum separation of four inches (4") above the pipe. The tracer wire will be installed with the water main and attached to all in-line valves, hydrant valves, hydrants and service lines to insure signal conductivity along all portions of the new main. Connections shall be DryConn 3-way Direct Bury Lug OR Copperhead Mainline-to-Service Connector 3WB-01.
 - For open trench, a Copperhead High Strength 1230 wire shall be used.
 - For directional boring, a Copperhead Extra High Strength 1245 shall be used.
 - For pipe bursting, a Copperhead SoloShot Xtreme Strength 7x7 stranded PBX-50 shall be used.
 - For fire hydrants, tracer wire shall terminate at trace wire access box. Copperhead T3-75-F shall be used.
- Fittings shall be ductile iron, 250 psi pressure rating, cement mortar lined with restrained push-on joint or mechanical joint with MEGALUG retainer glands, or approved equal.
- Water Main Bolts shall be stainless steel ASTM 304.
- Restrained Joints - All fittings shall have restrained joints. All water main piping in casing shall have restrained joints. Restrained joints shall be push joint with a field lock gasket or a mechanical joint with MEGALUG retainer glands, or approved equal. All bends, tees, and dead end piping must be restrained a minimum of 24" in both directions of the fitting. Thrust cement blocking of all fittings, hydrants, and dead end piping is required.
- Pressure connections - Pressure tapping sleeves shall be all stainless steel.
- All valves shall be resilient wedge gate valves installed in a precast concrete vault. Valves shall be Mueller, Waterous, or Clow manufacture. All bolts shall be stainless steel.

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CITY OF WARRENVILLE STANDARD SPECIFICATIONS

- Valve vaults shall be pre-cast concrete units. For water mains 8-inch diameter or less, the vault shall be 48-inch inside diameter. For water mains 10-inch diameter and greater, the vault shall be 60-inch inside diameter.
- Frames and lids shall conform to Neenah Foundry R-1713 or approved equal and the word "WATER" shall be cast in the cover.
- Casing - Spacers All joints within the casing shall be restrained. Spacers shall be installed on all pipe in casing. Spacers shall be bolt on style with a shell made in two sections of heavy 1-304 stainless steel. Casing shall be filled with pea gravel or sand and sealed at both ends.
- All ductile iron pipes and fittings are required to be encased in 8-min polyethylene conforming to AWWA C-105.
- It shall be the responsibility of the contractor to obtain and supply certification for all materials. Shop drawings shall be submitted to and approved by the City before installation.
- Depth of bury for water main to be 5'-6" (minimum).
- Installation shall conform to "Standard Specifications for Water and Sewer Main Construction in Illinois" latest edition.

FIRE HYDRANTS

- Hydrant shall be FM approved and UL listed, shall conform to AWWA C-502, and shall have breakaway safety flanges.
- Hydrants shall be Mueller Centurion, Waterous WB67-250, or Clow Medallion.
- All bolts shall be stainless steel from and including the breakaway flange to the inlet on the hydrant shoe.
- All hydrants shall have a bronze cross arm / top plate.
- Connecting piping shall be six-inch (6") diameter shall be polyvinyl chloride plastic (PVC) pressure pipe per AWWA specification C-900, Class 150 (DR-18). The above pipe and fittings shall be furnished with elastomeric gasket joints conforming to ASTM F477.
- Main Valve opening shall be five and one quarter inch (5-1/4") in diameter, compression type, with a brass drain valve.
- Nozzles shall have threaded male ends conforming to "American National Standard Fire Hose Connection Screw Threads. The hydrant shall have two nozzles of 63 mm which are 2-1/2" and one pumper nozzle of 114 mm (4-1/2") with caps and chains.
- Hydrants shall have a minimum working pressure of 175 psi.
- Hydrants shall open in a counter-clockwise direction, as indicated by an arrow and the word "OPEN" on the dome.
- Hydrants shall be painted a high visibility red, factory applied paint. Hydrants shall have a six-inch (6") auxiliary valve with box on the inlet piping. Valve shall meet water main piping specifications for the City of Warrenville. Auxiliary valve attached to hydrant shall have stainless steel bolts at the flange inlet.

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CITY OF WARRENVILLE STANDARD SPECIFICATIONS

WATER SERVICES

- For water services 2-inch diameter and less shall be Type "K" copper OR ADS potable water service tubing (CTS) pipe SDR 9. Pipe requirements of ASTM D2737, AWWA C901 and NSF Standard 14 and 61. Pipe dimensions shall meet Copper Tubing Size (CTS) standards. Minimum service size of one-inch (1") diameter. Non-copper services will require copper clad steel (SSC) blue tracer wire. See Watermain specifications for types.
- Brass shall be Mueller or Ford. All brass is to have compression fittings. Compression fittings must be of the stainless full circle ring retinage. No set screws are allowed. Flair fitting are NOT acceptable.
- B-Boxes shall be of the arch pattern design with a telescoping one and one quarter-inch (1-1/4") iron pipe upper section, pentagon nut access, enlarged base for 1-1/2" roadways and larger, manufactured in the USA.
- Tapping saddle at minimum shall be epoxy coated ductile with two stainless steel bands. All stainless steel saddles are acceptable. Manufactured in USA.
- All repair clamps shall be full circle stainless steel.
- Depth of bury for water services to be 5'-6" (minimum) to 6'-6" (maximum).

SANITARY SEWER

- All sanitary sewer and sanitary sewer service pipe shall be SDR 26 ASTM D-2241 and fittings shall meet the requirements of ASTM D-3139 or equivalent. **Note:** This is a pressure rated pipe.
- Sanitary sewer services shall be a minimum of 6-inches in diameter. Cleanout should be provided (preferred outside of home).
- All sanitary sewers shall be air and mandrel tested, and televised, including private commercial lines between inspection manhole and the public sanitary sewer. Copies of DVDS and reports shall be provided to the City.
- Sanitary sewer manholes shall have openings for the pipe connections cast into the wall of the structure. Rubber gasketed coupling (boot) with stainless steel bands / retainers shall be per ASTM C-923.
- When connecting to an existing manhole, the hole must be cored and a rubber gasketed coupling (boot) with stainless steel bands / retainers shall be per ASTM C-923. The bench shall be removed and repaired, if necessary. Rubber boots/seals must be used where pipes enter manholes. The internal connection shall be dressed up with non-shrink hydraulic cement. Hydraulic cement, mortar, and concrete must be of the strength and water-tightness quality as specified in the ASTM standards.

STORM SEWER

- All storm sewers 18-inch diameter and less shall be PVC SDR26 with pipes and fittings meeting ASTM D-3034.
- All RCP storm sewers shall be installed with rubber gasket joints.

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CITY OF WARRENVILLE STANDARD SPECIFICATIONS

- The minimum storm sewer size allowed in the public right-of-way will be 10-inch diameter unless conditions warrant a smaller size.
- On private property, storm sewer installed to drain an existing depressional area shall generally be six-inch or eight-inch (6" or 8") diameter, unless a larger size is supported by calculations.
- Storm manholes and catch basins shall be pre-cast concrete units. For storm sewers 21-inch diameter or less, the manhole shall be 48-inch inside diameter. For storm sewers 24-inch through 42-inch diameter, the manhole shall be 60-inch inside diameter. For storm sewers 48-inch diameter and larger, the manhole shall be 72-inch inside diameter.
- Rings / steps shall be installed in manholes unless specifically prohibited.
- The minimum size structure shall be a 2-foot diameter precast concrete inlet, unless conditions warrant a different structure.
- Frames and lids shall conform to Neenah Foundry R-1713 or approved equal and the word "STORM" shall be cast in the cover.
- Allowable curb and parkway castings for inlets and catch basins:
 - When a barrier curb is present, use a Neenah R-3275 frame and grate (for B-6.12 curb and gutter, widen gutter section to accommodate larger grate).
 - For some slope conditions when a barrier type curb is present, a Neenah R-3065-L frame and grate may be used (for B-6.12 curb and gutter, widen gutter section to accommodate larger grate).
 - When roll curb is present, use a Neenah R-3501-P frame and grate.
 - In lawn areas, use beehive type grate, Neenah R-4340-B.
 - In lawn areas where a lot of trees are present, in public right-of-way and in ditches, use stool type grate, Neenah R-4342.
 - When applicable in parking lots or lawn areas, use round grate Neenah R-2502-A.

Round grates will not be allowed in the street. Equivalent substitutions may be permitted, if approved by Public Works.

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CITY OF WARRENVILLE STANDARD SPECIFICATIONS
WATER MAIN, SANITARY SEWER AND STORM SEWER

WATER MAIN

- All open cut water main shall be polyvinyl chloride plastic (PVC) pressure pipe per AWWA specification C-900, Class 150 (DR-18). The above pipe and fittings shall be furnished with elastomeric gasket joints conforming to ASTM F477. Trench Backfill shall be utilized to twelve inches (12") above the top of the PVC water main.
- All water main installed by horizontal directional drilling shall be PVC per AWWA specification C-900 with CertLok joints. Assembly and installation of pipe shall be in accordance with the manufacturer's instructions. All material specifications shall be submitted to the City and approved prior to installation.
- Copper clad steel (SSC) blue tracer wire shall be installed directly over the center of the water main in the trench with a maximum separation of four inches (4") above the pipe. The tracer wire will be installed with the water main and attached to all in-line valves, hydrant valves, hydrants and service lines to insure signal conductivity along all portions of the new main. Connections shall be DryConn 3-way Direct Bury Lug OR Copperhead Mainline-to-Service Connector 3WB-01.
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 - For directional boring, a Copperhead Extra High Strength 1245 shall be used.
 - For pipe bursting, a Copperhead SoloShot Xtreme Strength 7x7 stranded PBX-50 shall be used.
 - For fire hydrants, tracer wire shall terminate at trace wire access box. Copperhead T3-75-F shall be used.
- Fittings shall be ductile iron, 250 psi pressure rating, cement mortar lined with restrained push-on joint or mechanical joint with MEGALUG retainer glands, or approved equal.
- Water Main Bolts shall be stainless steel ASTM 304.
- Restrained Joints - All fittings shall have restrained joints. All water main piping in casing shall have restrained joints. Restrained joints shall be push joint with a field lock gasket or a mechanical joint with MEGALUG retainer glands, or approved equal. All bends, tees, and dead end piping must be restrained a minimum of 24" in both directions of the fitting. Thrust cement blocking of all fittings, hydrants, and dead end piping is required.
- Pressure connections - Pressure tapping sleeves shall be all stainless steel.
- All valves shall be resilient wedge gate valves installed in a precast concrete vault. Valves shall be Mueller, Waterous, or Clow manufacture. All bolts shall be stainless steel.

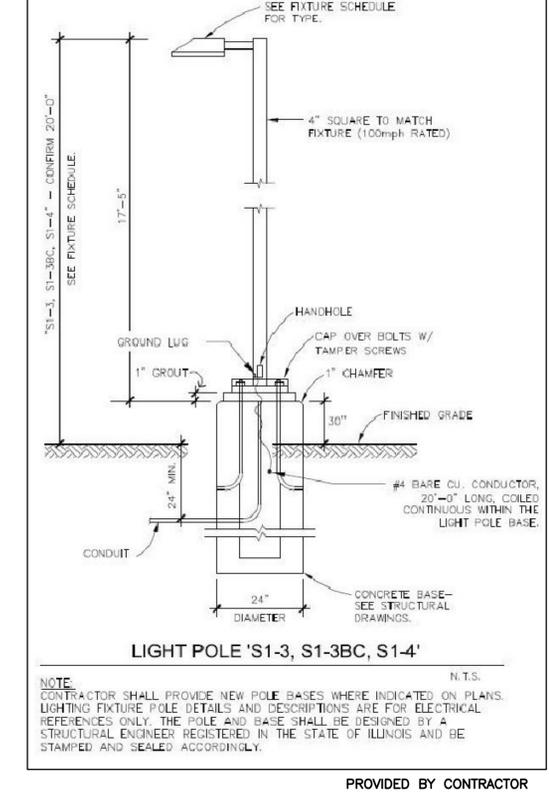
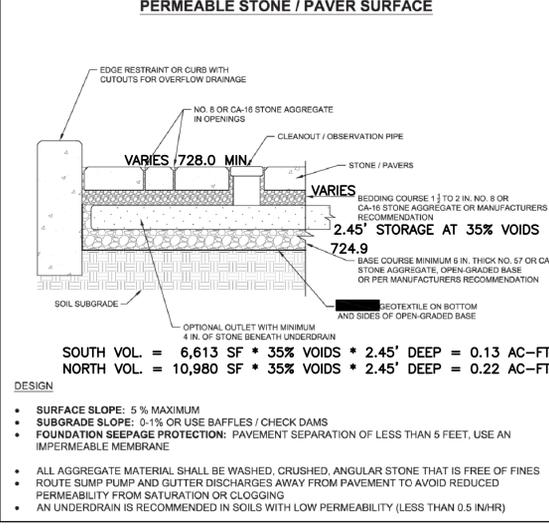
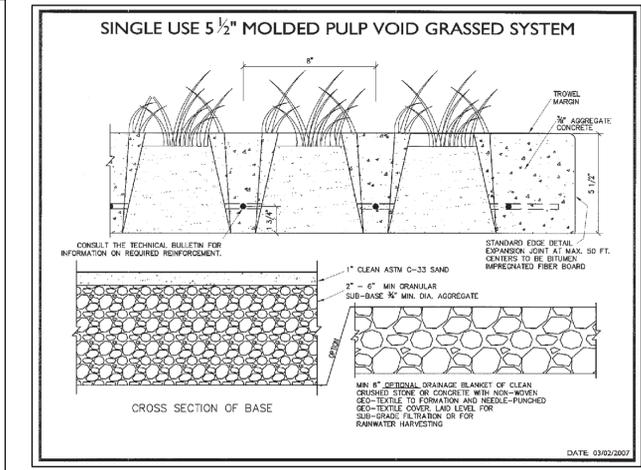
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CITY OF WARRENVILLE SIGN SPECIFICATIONS

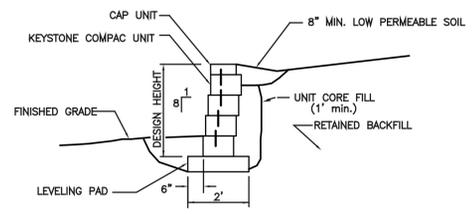
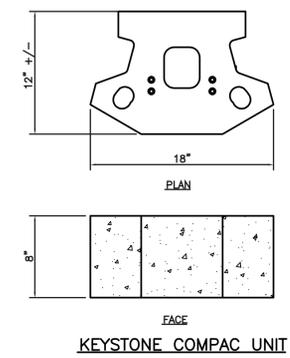
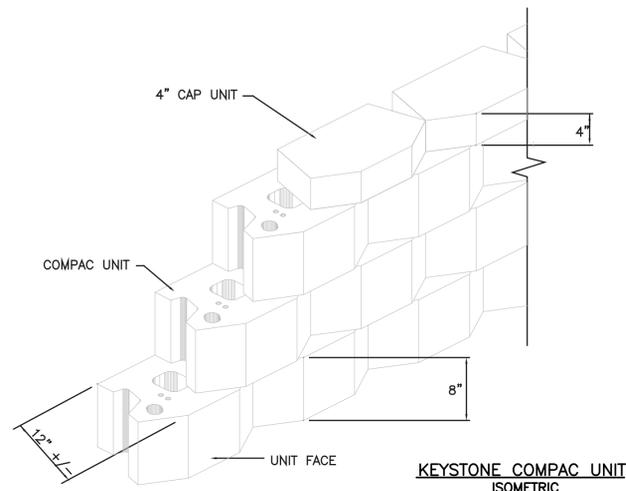
- STOP SIGNS**
TYPE: MUTCD R1-1, High Intensity Prismatic
SIZE: 30" X 30"
- NO PARKING ANYTIME**
TYPE: Diamond Grade, Red Letters on White Background, All Caps
SIZE: 12" X 18"
- NO PARKING THIS SIDE OF STREET**
TYPE: Diamond Grade, Red Letters on White Background, All Caps
SIZE: 12" X 18"



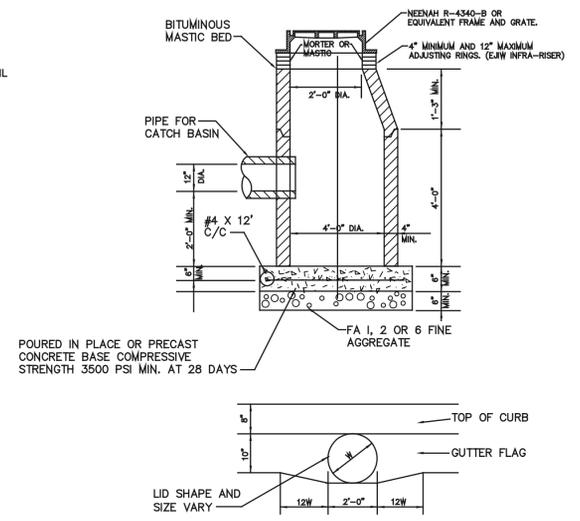
Page 1 Last Revised 11/4/2019



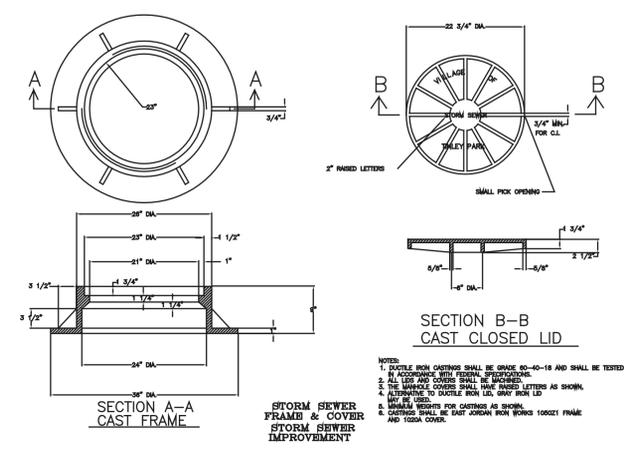
DATED: JULY 7, 2025		ENGINEERED BY: KDC CONSULTANTS INC. WWW.KDCCONSULTANTSINC.COM 16144 S. BELL ROAD HOMER GLEN, ILLINOIS 60491 (708) 645-0545	
REVISION	DATE		
ORIGINAL	08/20/21		
CITY COMMENTS	11/30/21		
CITY COMMENTS	07/07/25		
		WARRENVILLE TALBOT CITY SPECIFICATIONS	
		PROJECT 20-04-036-ENG	8 PAGE OF 10 © COPYRIGHT, ALL RIGHTS RESERVED



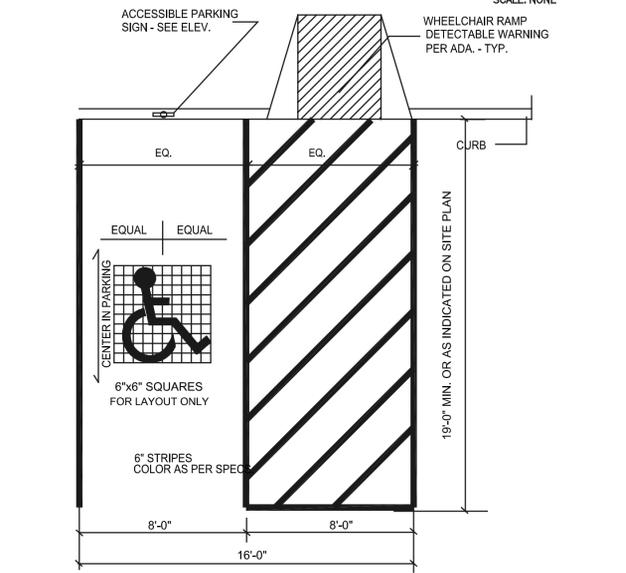
NOTE:
MAXIMUM DESIGN HEIGHT PRIOR TO USE OF SOIL STABILIZED REINFORCEMENT:
COMPACT UNITS: 3 FEET
STANDARD UNITS: 6 FEET
PRIOR TO CONSTRUCTION, WALLS TO BE DESIGNED & CERTIFIED BY A STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
SHOP DRAWINGS WITH STRUCTURAL SEAL SHALL BE SUBMITTED TO THE CITY FOR THEIR FILES.



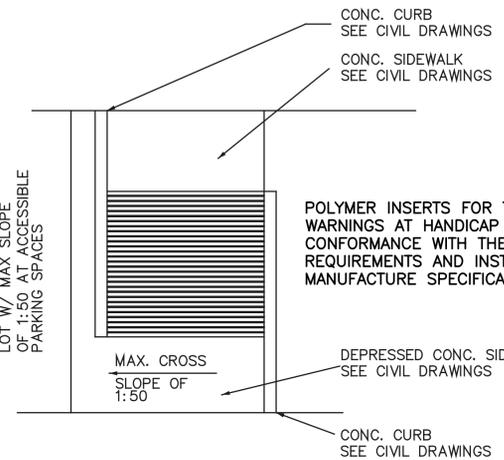
NOTE:
1. CA-11 OR CA-13 AGGREGATE BACKFILL AROUND CATCH BASIN TO SUBGRADE ELEVATION



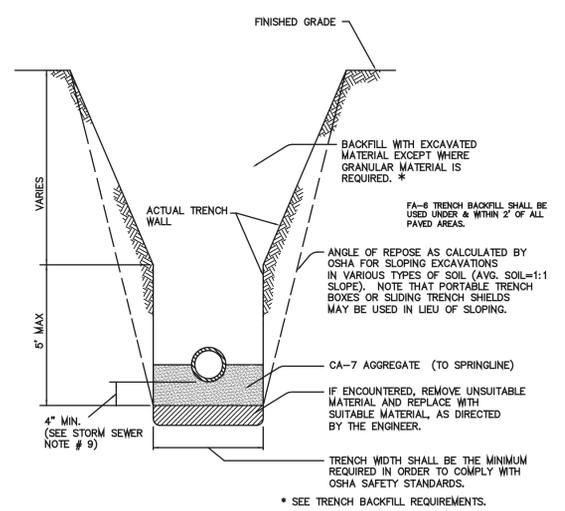
NOTE:
1. CASTLE IRON CASTINGS SHALL BE GRADE 60-65-18 AND SHALL BE TESTED IN ACCORDANCE WITH TESTING PROCEDURES.
2. THE MANHOLE COVERS SHALL HAVE RAISED LETTERS AS SHOWN, & ACCORDING TO THE CITY OF ILLINOIS.
3. RAISED LETTERS FOR CASTINGS AS SHOWN.
4. GASKETS SHALL BE EAST JORDAN IRON WORKS 100021 FRAME AND 1000A COVER.



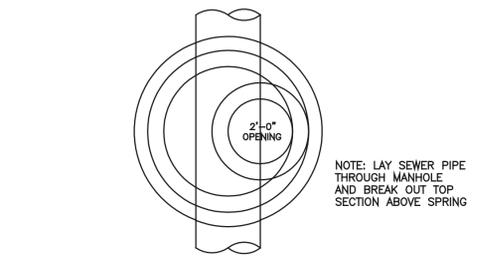
HANDICAP PARKING SIGN R7-8:
1/8" ALUMINUM PANEL SCREEN PRINT SYMBOL COLORS:
-LEGEND AND BORDERS - (PANTONE 340C)
-WHITE SYMBOL ON PATONE 286 BACKGROUND
-BACKGROUND- WHITE



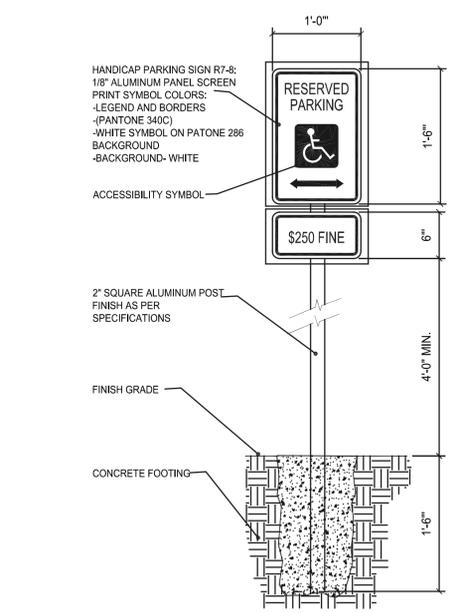
NOTE:
USE OF EAST JORDAN IRON WORKS 7005 SERIES DETECTABLE WARNING PLATES FOR THE SIDEWALK CURB RAMPS.



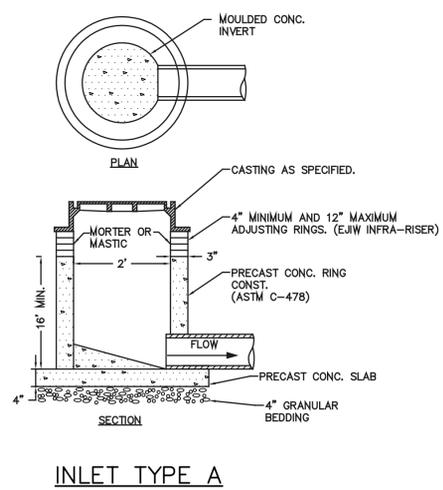
TYPICAL TRENCH SECTION FOR STORM SEWER



NOTE: LAY SEWER PIPE THROUGH MANHOLE AND BREAK OUT TOP SECTION ABOVE SPRING
CASTING AS SPECIFIED
4" MINIMUM AND 12" MAXIMUM ADJUSTING RINGS (EJW INFRA-RISER)
NOTE: EXCAVATION AREA TO BE JETTED AND COMPACTED
C.I. MANHOLE STEPS 16"
PRECAST CONCRETE RINGS
CONCRETE FILLET
CONCRETE BASE
NOTE: DIAMETER OF BASE IS 12" LARGER THAN OUTSIDE DIAMETER OF MANHOLE WALLS.
NOTE: "A" DIMENSION = 48" DIAMETER FOR 24" DIAMETER SEWER AND SMALLER. 60" DIAMETER FOR 27"-36" DIAMETER SEWER. 72" DIAMETER FOR 42"-54" DIAMETER SEWER.



\$250 FINE SIGN PER ILLINOIS STANDARD RT01 101
1/8" ALUMINUM PANEL SCREEN PRINT SYMBOL. COLORS:
LEGEND AND BORDERS- GREEN (PANTONE 340C) NON-REFLECTORIZED
-BACKGROUND- WHITE REFLECTORIZED.



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REVISION	DATE	WVILLE TALBOT DETAILS	
ORIGINAL	08/20/21		
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CITY COMMENTS	07/07/25		
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