# PRELIMINARY ENGINEERING

**FOR** 

## **CAR WASH FACILITY**

AT

1492 W. OGDEN AVE. NAPERVILLE, IL 60540

LEC	<b>SEND</b>	
DESCRIPTION	EXISTING	PROPOSED
SANITARY SEWER	->>-	$\rightarrow$
STORM SEWER	->-	$\rightarrow \rightarrow$
COMBINED SEWER	->>->>	-)>)>-
WATERMAIN	w	w
GAS	—gas—	—-g—
TELEPHONE	—-T—	—-t
ELECTRIC	—е—	—E—
OVER HEAD WIRE	OHW	OHW
CURB		
FENCE	-XXXX	
STORM CATCHBASIN OR MANHOLE, OPEN GRATE	₩₩	•
SANITARY MANHOLE & STORM MANHOLE, GLOSED LID	99	•
INLET & FLARED END SECTION		
SEWER CLEANOUT	C.O.	•
FIRE HYDRANT & VALVE VAULT	₩ ®	₩ €
SIAMESE CONNECTION & B-BOX	R ⊗	¥ ⊚
WATER METER VAULT	M	M
GAS VALVE LIGHTS	o →	
UTILITY POLE & GUY ANCHOR		+ • •
	-0	4+4
DRAINAGE ARROWS	- M	~~
ELEVATIONS TOP OF CURB	× XXX.XX	
TOP OF CURB EDGE OF PAVEMENT TOP OF CURB	XXX.XX XXX.XX	XXX.XX XXX.XX
GUTTER EDGE OF PAVEMENT	XXX.XX XXX.XX XXX.XX	- <del>*****</del>
OVERLAND OVERFLOW	000	
SOIL BORINGS	N/A	<b>⊕</b> B-X
TRAFFIC SIGN	791	-
TRAFFIC ARROW	€ €	<b>→</b> €
PARKING STALL COUNT	<b>A</b>	A
CONCRETE	15.140	183
MAIL BOX 🖽	MEASURED	50.0
TRAFFIC SIGNAL BOX	RECORD/DEED	(50.0
TRAFFIC SIGNAL .	POINT OF COMP	
TELEPHONE BOX O	POINT OF BEGIN	
FOUND IRON PIPE Ø	RADIUS	A R
SET IRON PIPE O	CHORD BEARIN	
FOUND IRON ROD	POINT OF CURY	
SET IRON ROD	POINT OF TANG	
FOUND CUT CROSS #	TOP OF FOUND	ATION TIE
1 00000 TO	FINISHED FLOO	R F/I
FOUND P.K. NAIL   SET DIV NAIL   A	TOP OF CURB	T/C
OCT PARTON	BACK OF CURB	BO
FOUND CONCRETE MONUMENT  SET CONCRETE MONUMENT	EDGE OF PAVE	
	PROPERTY LINE	

## BENCHMARK & DATUM:

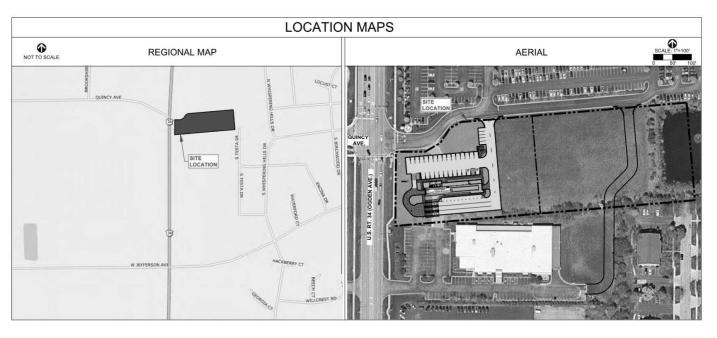
OURCE BENCHMARKS:

- CITY OF NAPERVILLE SURVEY MONUMENT STATION NO. 219
   ELEVATION = 692.52 NAVD88
- CITY OF NAPERVILLE SURVEY MONUMENT STATION NO. 1506
   ELEVATION = 690.61 NAVD88

**UTILITIES CONTACTS** 

## SURVEYED BY:

ASM Consultants, Inc. 16 E Wilson St - Batavia IL 60510 (630) 879-0200 advanced@advct.com



PERMIT AGENCIES			
AGENCY	APPLICATION #	PERMIT#	DATE ISSUED
CITY OF NAPERVILLE			
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY - WATER POLLUTION CONTROL			
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY - WATER			
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY - NOTICE OF INTENT			1
			9

NOT FOR CONSTRUCTION PENDING PERMIT REVIEW

No.	SHEET TITLE	
C-1	TITLE SHEET	
C-2	SPECIFICATIONS	
C-3	EXISTING CONDITIONS	
C-4	GEOMETRIC PLAN	
C-5	GRADING PLAN	
C-6	UTILITY PLAN	
C-7	CAR QUEUE LINE EXHIBIT	
C-8	CAR TURNING EXHIBIT	
C-9	FIRE TRUCK TURNING EXHIBIT	
C-10	DRAINAGE EXHIBIT	
C-11	STORMWATER POLLUTION PREVENTION PLAN	
C-12	STORMWATER POLLUTION PREVENTION DETAILS	
C-13	DETAILS	
C-14	DETAILS	
C-15	DETAILS	
C-16	DETAILS	







	SUBMITTALS AND REVISIONS			
Ne.	DESCRIPTION	DATE		
1	VILL PRELIM REV. #1	10-17-2		
2	VILL. PRELIM. REV. #2	11-10-2		
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## PRELIMINARY ENGINEERING

FOR

## CAR WASH

1492 W. OGDEN AVE NAPERVILLE, IL 6054

DESIGNED BY:	M.S.E.
DRAWN BY:	K.S.B.
DATE:	08/09/2023
PROJECT #:	1621

TITLE SHEET



## CITY OF NAPERVILLE STANDARD CONSTRUCTION PLAN NOTES FOR DEVELOPMENT PROJECTS

The City of Naperville Transportation, Engineering and Development (TED) Business Group has established Standard Notes, which should be included in the final engineering plans for private development projects. The Standard Notes are broken out by type of work. The Constituted designing the final engineering plans should review the lists below to determine which Standard Notes should be

their own Standard Notes they require for water and sanitary sower work in private development final engineering plans. Please contact DPU-W for the Water/Wastewater Standard Notes.

- GENERAL NOTES
  The General Notes in this section should be included in all final engineering plans regardless of the type of project.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF NAPERVILLE DESIGN MANUAL AND STANDARD SPECIFICATIONS (SUBSIPIT FORIOXI) AND WITH THEIR HOUGE SPEARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT BUILDIN).
- ALL CONTRACTORS DOING WORK IN THE PUBLIC RIGHT-OF-WAY MUST BE LICENSED (WHEN APPLICABLE) TO MAKE PUBLIC IMPROVEMENTS WITHIN THE NAPERVILLE CORPORATE LIMITS.
- THE CONTRACTOR/DEVELOPER ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR ANY ACTION RESULTING FROM THEIR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- 5. THE CONTRACTOR/DEVELOPER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF NAPERVILLE
- THE CONTRACTOR AND THEIR ON-SITE REPRESENTATIVES WILL BE REQUIRED TO ATTEND A
  PRECONSTRUCTION INSERTING WITH THE CITY OF INAPERVILLE PRIOR TO LANY WORK BEING STARTED. A
  PRECONSTRUCTION MEETING WILL NOT BE SCHEDULED UNTIL THE PROJECT HAS BEEN APPROVED BY THE
  CITY OF NAPERVILLE DEVELOPMENT REVIEW TEAM AND THE REQUIRED SURETY HAS BEEN POSTED.
- 9. IT SHALL BE THE CONTRACTOR'S PESPONSIBILITY TO ADEQUATELY IDENTIFY AND LOCATE ALL EXISTING UILLIES PHIGH TO EXCAVATION BEFORE STARTING CONSTRUCTION, THE CONTRACTOR SHALL CONTRACTOR ADJUST FOR THE LOCATION OF ANY AND ALL UILLIES THE TOLLIFES EN MISER IS BROOGEVIZE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY PRIVATE FACILITIES OR NON-JULE MEMBER FACILITIES.
- 10. THE CONTRACTOR CAN SCHEDULE ALL NECESSARY SITE INSPECTIONS WITH THE CITY OF NAPERVILLE BY CALLING (930) 423-0300 OPTION 1 BETWEEN THE HOURS OF 8300ALAND 4,00PM (CLOSED 1)00PM TO 2,00PM DAILY (O) WEREDAYS WHEN THE CITY IS OPEN DRIBUNESS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE SITE PERMIT NUMBER FOR THE PROJECT IN ORDER TO SCHEDULE THE INSPECTION(S).
- RECORD DRAWINGS ARE REQUIRED TO BE SUBMITTED AND APPROVED BY THE CITY OF NAPERVILLE PRIOR TO FINAL OCCUPANCY BEING GRANTED.
- 12. FINAL ACCEPTANCE OF PUBLIC IMPROVEMENTS SHALL BE GRANTED ONLY AFTER A FINAL INSPECTION HAS BEEN COMPLETED AND HAS REVEALED THAT ALL IMPROVEMENTS HAVE BEEN SATISFACTORILY COMPLETED BIACCORDANG PMTH THE INSPENTY I ESTABLIANDS SPECHEATIONS, UTILITIES ARE TOT CONSIDERED ACCEPTED UNITL. THEY ARE FORMAL ACCEPTED BY THE CITY COUNCIL AS REQUIRED IN ACCORDANCE WITH THE NAHENALLE MINISPALL COVE.

## GENERAL NOTES (Project Specific)

TRAFTE SIGNALS AND THEIR ASSOCIATED EQUIPMENT UNDER THE JURISDITION OF DUPLAGE COUNTY ABOUT NOT INCLUDE BIT THE JULIE SYSTEM. THE CONTRACTION SHALL CONTRACT DUPLAGE COUNTY OF OR THOU DEPECTLY RECARDING THE LOCATION OF TRAFTIC SIGNALS (CABLING AND ASSOCIATED SYSTEMS) UNDER DUPLAGE COUNTY OR BOTH JURISDICTION.

## STORM SEWER NOTES (GENERAL)

- NO CONNECTION TO AN EXISTING PUBLIC STORM SEVIER MAY BE MADE WITHOUT PERMISSION OF THE CITY ENGINEER.
- THE CONTRACTOR SHALL REPARE ANY EMISTING FIELD DRAFFAGE THE DAMAGED DURING CONSTRUCTION AND
  PROPER Y REPOUTE ANDIOR CONNECT SAID THE TO THE MEAREST STORM SPIPER OUTLET, ALL LI CONTRAIS OF
  ENCOUNT ENELD PELLO DRAFFAGE THE STAIL HE PROPERTLY NUCKTIED ON THE CONTRACTOR'S RECORD
  DRAFFAGE.

## EROSION CONTROL AND DRAINAGE NOTES (GENERAL)

- THE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
- 2. DURING EXTENDED DRY PERIODS, THE CONSTPUCTION AREA(S) MAY NEED TO BE WATERED DOWN TO PREVENT THE BLOWING OF SOIL FROM THE SITE.
- 3. DURING CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE UTILIZED TO MINIMIZE THE TRACKING OF DIRT ONTO THE PRINCE STREET PARTIES. THIS THE CONTRACTOR'S RESPONSIBILITY TO KEEP PRINCE STREET EVALUATION TO FORT AND DEBRIS, AND IGHT THAT STRACKED ONTO THE PUBLIC STREETS SHALL BE PERSONNED THE SAVE DAY. FILE AMOUNT TRACKED ON THE PUBLIC STREET IS EXCESSIVE, CLEANING ANY OR REQUIRED MORE PERSONNED HIT SAVE.

## EROSION CONTROL AND DRAINAGE NOTES (PROJECT SPECIFIC)

- ALL FROSION CONTROL MEASURES SHALL BE PROPERLY INSTALLED, AS PERMITTED, PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. ALL EROSION CONTROL SHALL BE WAINTAINED UNTIL TURF IS ESTABLISHED.
- ACCEPTABLE PERIMETER EROSION CONTROL INCLUDES SILT FENCE, SILT WORM AND ANY OTHER APPLICATION APPROVED BY THE CITY ENGINEER.
- ALL OPEN CRATE STRUCTURES SHALL HAVE FROSION CONTROL PROTECTION IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLANS, STRAW BALES SHALL NOT BE USED.
- ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY, AFTER ANY 0.5 INCH OR GREATER RAINFAH, OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN THEIR FUNCTION.

## EROSION CONTROL AND DRAINAGE NOTES (NPDES PERMIT)

If is the responsibility of the dwifer or his designed to inspect all temporary erosion control measures per the reduirements of the npdes permit and correct any deficiencies as needed.

### STORM SEWER NOTES (STORM SEWER WORK IN PLANS)

The first note provided below includes information regarding all the allowable storm sever pipe materials. Only those materials that are identified on the plans are required to be included. However, if the contractor requests a change to the pipe material included in the associated pipe material information is not included in the engineering plans, the applicable Storm Sewer Note will need to be added to final engineering plans the as part of the Field Change request.

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  BESIDIATION ("76 CLASSES III III III ("Ne"). BITUMINOUS CONTS SHALL CONFORM TO ASTIM
  FOR PIPE SHALL CONFORM ("NE").

  HOMOGENCOUS BLAND OF BITUMEN INCRET FILLER AND SUITABLE SCUTENT APPROVED BY THE CIT
  ENGINEER, RUSBER GASHET LONDS SHALL CONFORM TO ASTIME CAS, REPROVEDED CONCRETE PIPE
  SHALL ALSO BE PERMITTED AS ROUND, ELLIPTICAL OR BOX SHAPED OR AS REINFORCED CONCRETE
  AND CAULANTS.
- NOMERNFORCED CONCRETE PIPE. NOMERNFORCED CONCRETE PIPE SHALL BE ALLOWED FOR PIPES WITH A DINCH OR SMALER DIMMETER NOMERNFORCED CONCRETE PIPE SHALL CONFORM TO ASTIM PERSONATION. IT IS ALLOWED TO STATE AND ADDRESS OF THE ACTIVITY OF THE CONFORMATION OF THE PIPE SHALL CONFORM TO ASTIMITY OF THE CONFORMATION OF THE CONFORMATION
- DUCTLE IRON PPE (DP) DUCTLE IRON PPE SHALL CONFORM TO ANSI A 21.51 (AVWA C-151), CLAS THICKNESS DESIGNED PER ANSI A 21.50 (AWWA C-150), TAT (SEAL), COATED AND CEMENT LINED PER ANSI A 21.4 (AWWA C-164), WITH MCCHAMOAL OR RUBBER RING (SUP SEAL OR PUSH ON) JONTS, ALL DUCTLE IRON PPE SHALL BE WARPED WITH DVCTFTYLENE.
- 1d. POLYMYL CHLOREE PIPE IPYC). POLYVNYL CHLORDE (PVC) PIPE SHALL CONFORM TO ASTMID 3034, TYPE PSM. THE MINIOUM STANDARD DIBINISION RATIO (SOR) SHALL BE 33. THE PIPE SHALL BE MINICE OF PVC PLASTE INVINCIA MINIMOM CELL CLASSIFICATION OF 12454-VA OD SHALL HAVE ANIMOM PIPE STEPNIESS OF FORM SIX (46) LBS PER INCH (31 / KPA). JOINTS FOR PVC PIPE SHALL BE FLEXIBLE FLASTOMETRIC SEAS PER AST MID 3017.
- HIGH DENSITY POLYETHELY/HE PPE (HUPE) HIGH DENSITY POLYETHYLENE (HUPE) PPE SPALL CONFORM TO THE REQUIREMENTS OF AASHTO M 220 AND W 241 PPE AND FITTINGS SHALL BE MADE FROM YEGH PE COMPOUNDS WHO! CONFORM TO THE REQUIREMENTS OF CELL CLASS 324420 AS DEFINED AND DESCHIBED IN ASTALD 3350, HUBBEH GASKET JÖNTS SHALL BE USED.
- If. FULLY GALVANIZED CORRUGATED STEEL PIPE FULLY GALVANIZED CORRUGATED STEEL PIPE I USED FOR RESIDENTIAL DRIVEWAY CROSSINGS ONLY WHEN A DITCH SECTION IS PRESENT. THE
- BEDING, OTHER THAILOCK/SET EMBERSHETT, SHALL CONSET OF GRAVEL, CHUSHED GRAVEL, OR FORSHED STOKE SHANT TO LINCH IN SEZE, AS A RAMINIAL, THE RATIFIELD SHALL CONFORM TO THE REQUIREMENTS OF TOOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CAP-OR CA-11 OF THE STANDARD SPECIFICATIONS.
- JULIUS CONTECTIVO DESIGNAR PRENATERIALS STALLE LUCE STIT ESCRET CLARP PROSESSION TYPE COMPINIONS CROCKED CSS. PROVIDE CSS. FRONCO NO. SERVER MOY DO, PEPER BIND OR PROPRIOTE DE COLU, MEMPA MYALES AS TANDARD, UDIT WITH IA TRANSITION DARRET HAN BE USED. THE NAME OF THE MANUFACTURER, CLASS, AND DATE OF ISSUE SHALL IF BE CHART USENTHERD ON ALL SECTIONS OF PIER. THE CONTRACTOR SHALL ALSO SUBURT BILLS OF LADING, OR OTHER DUALITY ASSURANCE DOCUMENTATION WHEN REQUESTED BY THE CITY PROMERS. ALL DISTANCES, ALL DISTANCES SHALL BE STAINLESS STEEL.
- MANHOLES FOR STORM SEWERS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCOMBANCE WITH ASTM CA78-05 (OR LATEST EDITION)
- WANNOLES SHALL BE FURNISHED WITH A SELF-SEALING FRAME AND SOLD COVER (EAST JORDANIRON WORKS 102 WITH THE ASSILD COVER, OR APPROVED COULD WITH THE WORD STIGHT MARRIED ON THE SECOND STORM MARRIED ON THE SECOND STORM MARRIED ON THE SECOND STORM SEAL OF THE SECOND STORM SEAL OF THE MARRIED COVER.
- VANIOLE STEPS ON MAXIMUM 16 INCHI CENTER SI ALL BE FURNISHED WITH EACH IMAN IDLE. SECURELY ANCHORED NET ACE, TRUET TO VERTICAL ALIGNMENT, IN ACCORDANCE WITH THE NAFFRM IF STANDARD DETAILS. STEPS SHALL BE COPOLINER FOLLY REPORTED WITH 12 INCH AS INSIGNASION ASSIGNADA, OLI LAI EST LEUTION, GRADE OF STEEL HEINFORGEMENT, MEETING ON EXCELLING ASTIM C 4750/8 (ON LAILEST EDITION) AND DAYS ASTANDARD.
- A) PAVEMENT: FAST JORDAN FION WORKS 1022 FRAME WITH TYPE MI RADIAL FLAT CRATE, NEFNAH R-2502, OR APPROVED EQUAL FOR OPEN GRATES. EAST JORDAN IRON WORKS 1022 FP/AME WITH TYPE A SOLID COVEN, NERNAH M-1712, OR APPROVED EQUAL FOR CLOSE LIDS.
- B) BARRIER CURB AND GUTTER: EAST JORDAN IRON WORKS 7220 FRAME WITH TYPE M1 GRATE AND T1 CURB BOX, NEENAH R-32/8-A, OR APPROVED EQUAL.
- DEPRESSED CURB: EAST JORDAN IRON WORKS 5120 FRAME AND GRATE, NEENAH R-3225-L, OR APPHOVED EQUAL.
- MOUNTABLE CURB: EAST JORDAN IRON WORKS 7525 FRAME AND GRATE, NEENAH R-3501-P, OR APPROVED EQUAL.
- NOAMPAVED AREAS: EAST JORDAN IRON WORKS 5827 BEEHIVE GRATE, NEENAH R-4240-8, OR APPROVEI EQUAL ALTERNATELY, IN AREAS WHERE THERE IS THE LIKELIHOOD OF PEDESTRIAN TRAFFIC, EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M\* RADIAL FLAT GRATE, OR APPROVED ECUAL MAY BE
- THE STEFI. CASHIG PIPE SHALL PERTUMINOUS COATED, A MINIMUM OF 30 MILS THICKIPES INSIDE AND O AND SHALL BE OF LEAK PROOF CONSTRUCTION, CAPABILL OF MITHISTANDING THE ATTICPATED LOADINGS SEE TRABLE 2011. IN THE NAPPENLY STANDARD SPECIAL CONTINUED THE MINIMUM WALL THOUSENESS VARIOUS STEEL CASING CHARLETERS. THE STEEL CASING PIPE SHALL HAVE MINIMUM WILD STRENGTH-OF SOOD PIRAL NO SIGLAL MEET THE REQUIREMENTS OF A SHANL HAVE MINIMUM WILD STRENGTH-OF SOOD PIRAL NO SIGLAL MEET THE REQUIREMENTS OF A SHANL MADE THE CASHING PIPE SHALL BE DELIVERED TO THE OS OST THE VITAL PREVIOUS PROFILE OS OST THE VITAL PROVIDED HAVE TO STOLL WITH A STRENGTH OF STRENGTH-OF COLUMN PROVIDED HAVE THE STRENGTH OF THE VITAL PROVIDED HAVE THE STRENGTH OF THE VITAL PROVIDED HAVE THE STRENGTH OF THE VITAL PROVIDED HAVE THE VITAL PROVIDED HAVE THE STRENGTH OF THE VITAL PROVIDED HAVE THE VITAL P
- 10. ALL PIPE SHALL BE LAID TRUE TO LINE AND GRADE, DIRT AND OTHER FOREICH MATERIAL SHALL BE PREVENTED FROM ENTERING THE PIPE OF RIPE, SONT DURING HANDLING OR LYMING OPERATIONS. AT STORM SEMPER PIPE TO PIPE CONNECTIONS SHALL BE SEALED WITH BUTH MASTED TO SENSIFE WAS ATE TIGHTNESS, LIFT HOLES TO BE SEALED USING BUTT, MASTED AND CONCRETE PLUES, AT NO TIME SHALL CONNECTIONS BETVERT HER STORM SEVER AND SANITARY SEMPLE RE ALLOWED.
- FOR STRUCTURES LOCATED IN PAYED AREAS, A MINIMUM OF FOUR 2-INCH DIAMETER HOLES SHALL REDURLED OR PRECAST INTO THE STRUCTURE WITHIN 1 FOOT OF THE LOWEST PIPE INVERT, THE HOLES SHALLD BE DISTHIBUTED EQUIDISTANT AND THE PRIMETER OF THE STRUCTURE, A FOOT SET OF 1-FOOT SECTION OF LINDERGRAIN FILTER CLOTH MATERIAL SHALL BE SUFFICIENTLY FIXED TO THE OUTSIDE OF THE MANHOLE WITHIN MASTER MATERIAL TO PREVENT SUPPAGE DURING BACKFILL NO.
- 12. ALL STORM SEVIER STRUCTURE FRAMES WITHOUT INSIDE FLANGES SHALL BE SHAPED WITH NONSHRINKING HYDRAULIC CLIMENT TO FORM A FILLET TO THE STRUCTURE OR ADJUSTING RING.

WHEN ADJUSTMENTS ARE NECESSARY, NO MORE THAN 12 INCHES OF VERTICAL ADJUSTMENT MAY BE MADE USING THE MINIMUM PRACTICAL NUMBER OF INDIVIDUAL RINGS.

ALL RINGS SHALL BE HIGH DENSITY POLYETHYLENE PLASTIC HIDDES, RECYCLED RUBBER, HIGH DENSITY CYPANION OF DOLYSTYRENC, EXPANDED POLYBROPY-LING, (EPP), OR OTHER MATERIAL AS APPROVIDE DY THE CITY ENGINEER. PRECAST CONDERED RINGS, BOLDES, ROCKS, SHAMS, OR CONCRETE BLOSSIS WILL HOT BE ALLOWED, TAYERED ADJUSTING RINGS SHALL BE PECUIRED WHEN THE FRAVE WILL NEED TO MATCH THE SUCPECT FIRE PARADIWAY.

A RESLENT, FLEXELE, NON-HARDENING, PREFORMED SITUMINOUS MASTIC MATERIAL CONSEAL 10.2 B OR APPROVIDE GOLAL, SHALL BE USED SETWEST IT E. CONS. OT TO PARREL, SECTION OF THE STRUCTURE AN ARTICL CASE. THE STRUCTURE AND ARTICL CASE. THE STRUCTURE IN ADJUSTIC AND ARTICLE CASE. THE STRUCTURE IN ARTICLE THE STRUCTURE.

### GEOMETRIC AND PAVING NOTES (GENERAL)

- THE DEVELOPER AND CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO ADEQUATELY PROTECT THE PAVEMENT AND
  PROPERTY, CURB AND CUTTER AND OTHER RICHT-CO-WAY MIPROVEMENTS, WHETHER NEWLY CONSTRUCTED OR EXISTING,
  FROM ANY AND ALL DAMAGE SUTTICENT HEARD SHALL BE EMPLOYED BY THE CONTRACTOR TO PROTECT AGAINST SUCH
  DAMAGE TO THE SATISFACTION OF THE CITY ENGINEER.
- ANY NEW OR EXISTING IMPROVEMENTS THAT ARE DAMAGED SHALL BE REPAIRED OR REPLACED IN A MANNER THAT IS SATISFACTORY TO THE CITY ENGINEER.
- THE CONTRACTOR AND/OR DEVELOPER SHALL SECURE ALL NECESSARY RIGHTS AND PERMISSIONS TO PERFORM ANY WORD ON PHAVIE PROPERLY NOT WHEN HE HE SOLE.

  REPORCHEBELT FOR DAMAGES THAT MAY OCCUR AS A RESULT OF WORK PERFORMED UNDER CONTRACTS THEY DITTATE.
- THE CONTRACTOR/DEVELOPER WILL BE RESPONSIBLE FOR BRINGING PAVEMENTS (STREET, CURB AND GUTTER, SIDEWALK, DRINEWAY) ON THE PROPERTY OF TO GIT'S TANDARDS INCLUDING ANY REPAIRS TO SUBSTANDARD PAVEMENTS THAT CHISTLE PROPERTY OF OR OCCURRED DUSING CONSTRUCTION.
- WHEREVER NEW WORK WILL MEET EXISTING CONDITIONS OTHER THAN LAWN AREAS, REGARDLESS OF WHETHER THE NEW OR CASETING WORKS A SAFALT OR CONCRET. THE CASETING AUGULEAT SECURIAL SECTION OF CHARGES AS ASSOCIATIVE AND A CONTROL OF THE SAFA CASETING AND LEG HIS A DEAT STRANGED HE NEW THEORETY, DOES OT HATTI RENDERS A SMOUTH VERTICAL. FACE TO MATCH TO LEFT THE CONTROL OF A CASETIL OR DOES NOT SAW DEEP ENOUGH AND THE COTT LINE BERKAS OUT OF CHIPS TO AN IMPRESENCE DEEP. THEN THE EXISTING SOE WISTED BE ACCURED AND A CORRESPONDED FOR THE PROPERTY OF THE CONTROL OF THE MET AND A CONTROL WORST AND A CONTROL OF THE CONTROL OF THE MET AND A CONTROL WORST AND A CONTROL OF THE MET AN
- ALL PAYEMENT PATCHES WITHIN THE PUBLIC RIGHT-OF-WAY MUST CONFORM TO CITY STANDARDS. REFERENCE NAPERVILLE STANDARD DETAILS 590.12 AND 590.13.

## TRAFFIC CONTROL AND PROTECTION NOTES (GENERAL)

- ALL DEVELOPERS AND CONTRACTORS SHALL PROVIDE SUITABLE TRAFFIC CONTROL FOR THEIR CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH PART 8 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL IDENCES INJUTION). LATEST FORTON, TRAFFIC CONTROL HUMB TE PROVIDED FOR TWA TOUTH THAT INFORM TRAFFIC FORTON TRAFFIC CONTROL HUMB TO LIVED SUBJECT FOR THE TOUTH THE TOT, ROAD CLOSINES HOUGHING DEFOUNDS THE TABLE CONTROL FOR THE CLOSINES INARVOY LANES, AND CONSTRUCTION VEHICLES DETERMINED AND EXPERTED OF THE CONTROL EXPLINES AND EXPRISED THE TOT IN THE PROVIDED THE THAT THE TABLE PROVIDING POSITIVE SUBMINIOR TO MOTORISTS AND ARE NOT IN THEMSELVES PRESENTED AND A PROVIDED TRAFFIC TO CONTROL CONTROL TRAFFIC TRAFFIC TO MAY BE REPORTED THE THE TABLE THAT THE TABLE
- PEDESTRING MUST BE PROVIDED WITH A SYFE ALTERNATE ROUTE PEDESTRING PACIFIES ARE TO BE CLOSED AS A BESIX. OF CONSTRUCTION ACTUATES, GUIDANCE MUST BE PROVIDED TO PEDESTRIANS OF INTIT TIES WAY AND THE WORK ZONE. SAD PEDESTRIANS DETOUR PLAN (WITH SKINAGE) IS TO BE REVIEWED AND ACCEPTED BY THE CITY IN WRITING, PRIOR TO THE COMMENCEMENT OF THE WORK.
- THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE METHODS OF TRAFFIC CONTROL IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE MANUAL ON UNFOPM TRAFFIC CONTROL DEVICES, SUCH THAT THE SAFETY OF VEHICLES, AND PERSISTANCES BY PRESENEND A TLA THES, THE METELOTON AND MANUFAINCE OF THE TRAFFIC CONTROL DEVICES SHALL BE TO THE SATISFACTION OF THE AGENCY OF JURISDICTION AND THE CITY ENGINEER.

### TRAFFIC CONTROL AND PROTECTION NOTES (ARTERIAL ROADS)

- LANE CLOSURES ON ARTERIAL POADWAYS WITHIN THE CITY OF NAPERVILLE ARE NOT PERMITTED BETWEEN THE HOURS OF 6
  AN 5 AM AND 5 MM 7 PM MONDAY THROUGH IT SIDAY. UNLESS OTHEOWISE. APPROVED BY THE CITY ENGALECT. LAW.
  CLOSURES ON ARTERIAL STREPTS ARE YOUT PROMITTED RETWEEN THA WAILT FE HOU WIFFERIDS, UN IESS OTHERWISE
  APPROVED BY THE CITY ENGALECT. ALTERIAL PROMOWING ARE DETRIBLED, AS BOTH MAJOR AND MINOR ARTERIAL ROADWAYS AS
  DESIGNATED ON THE CITYS WAS TERN FROM CORPHANE PLAIN, LATEST ENTITION.
- ANY WORK THAT IMPACTS A TRAFFIC LANE ON AN ARTERIAL ROADWAY REQUIRES AN ARROW BOARD AS PART OF THE TR
  CONTROL.
- AT THE END OF EACH DAY OF WORK, THE ROADWAY MUST BE COMPLETELY REOPENED TO TRAFFIC. ANY OPEN HOLES MUST BE PLATED OR COLD PATCHED; THE CITY WILL NOT ALLOW THE HOLES TO BE FILLED WITH GRAVEL.

## CITY OF NAPERVILLE

## **DEPARTMENT OF PUBLIC UTILITIES - ELECTRIC GENERAL NOTES**

- The developer SHALL supply the DPU-E engineer with catalog outs for all CT/meter equipment (including but not limited to meter societis, PT cabinet, OT cabinet, disconnect cabinet) and transformer pad vault. The catalog outs SHALL be approved by DPU-E-prior to purchasing.
- 2. The CT/meter cabinet SHALL be top fed
- CT/meter equipment are long lead time items and DPU-E shall not be held responsible for delays resulting from non CT/meter equipment.
- DPUE will provide, install, and maintain the transformers, all primary (15kV) cable and conduit, and the meters and instrument transformers. DPUE will also make the final connections in the transformers once the inspection is complete and the building is ready to be energized.
- The developer is responsible for providing, installing, and maintaining the transformer pad/vault, all service lateral (480V) cable and conduit, the service entrance equipment including the GT/meter cabinet and all banked meter sockets. The developer SHALL coordinate also construction with DPUE to allow electric facilities to be installed prior paving and outbing. DPUE requires 30 working days advance written notice prior to prevenent installation to allow for the installation of electric facilities, oracle development by within 4 or final greating before electric facilities, oracle development by within 4 or final greating before electric facilities can be installed.
- Electric facilities SHALL be installed pursuant to Section 8-1G-3 of the City of Naperville Municipal Code, which requires a
  construction fee payment for installation of electric facilities.
- At all times, the Customer shall be solely responsible for maintaining a suitable approach to the meter boation, with no obstructive within four (4) feet of the front and two (2) feet of the sodes of the Meter. Per NAPERVILLE SERVICE RULES AND POLICIES 22.2.F.
- Clearance to transformer pad SHALL be 5' from all sides, 10' from front, and the area above must be completely clear of obstruction. No trees, shrubs, or other obstacles will be aboved within this area. Transformer pad SHALL maintain minimur clearance of 20' from egress points. Per DPUs specifications C10-2130 AND C30-0016.
- DPU-E requires a minimum 6' of separation between its electric facilities and any fire hydrants storm drains, storm sewers, water mains, gas mains, etc. that run parallel to its facilities.
- 12. To have an existing service disconnected call the City Dispatch office at 630-420-6187. Please allow at least 24 hours notice. Matters and moter scale are to be removed only by DPUE personnet. The location and type of new or replacement meter retaked equipment must be prespected by the DPUE. An adentic service must be inspected by the Development Services Team.
- Approval of metering equipment by DPU-E does not remove your responsibility to comply with the latest version of the National Electrical Code as adopted by the City of Naperville. Determination of compliance with the National Electrical Code will be made by the Transportation, Engineering and Development department.
- 15. A customer's grounding conductor shall not be connected to DPU-E distribution equipment.
- 16. Due to supply chain issues DPU-E is experiencing long lead times (+400 days) on transformers. Please take this into consideration
- 17. The developer is responsible for the construction and installation of a transformer pad and wall. The DPU-E engineer must be informed prior to the installation of the and wall. A main disconnect or circuit breaker is required for DPU-E access in case of a need for service or in an emergency DPU-E shall make the first corrections of the customer's service to the transformer terminals. A minimum of eight finat of additional conductor length must be left on the customer's service cables.

## CITY OF NAPERVILLE

## DEPARTMENT OF PUBLIC UTILITIES - WATER GENERAL NOTES

- New water main valves, including pressure tap valves, adjacent to an existing water main, and existing water mai valves shall only be operated by the City of Naperville. Department of Public Utilities CEE/CM Division personed with 48-hour notice (Monday-Friday). Contact Naperville TD Business Group at 650-425082 for scheduling.
- Any existing utility structures requiring edjustment or reconstruction shall be completed by the contractor to the satisfaction of the utility covers. Adjustments and/or reconstructions not called for on the plans shall be considered to incidental to be contract. No more than a total of 12 independent of adjusting rings and/or 2 adjusting rings shall be allowed. All structure frames shall be flush with final grade.
- Troos shall be installed a minimum of five (5) foot horizontally from underground deodrical fooders, sanitary servors, sanitary servors, water mains, and water services. Trees shall be installed a minimum of ten (10) feet horizontally from utility structures and appurtnamose, inducting, but not limited to, menholes, wave vauls, valve boxes and the hydratisk. No trees, structs or obstactes will be althored 10 in front of, 5 on the sides and 7 to the rear of the electrical transformer.
- All relatiner glands when required to restrain values, fittings, hydrants, and pipe joins shall be mechanical joint wodge action typo. IE.6.2.LUI 3100 Scross as menutratured by EBBA Iron, Inc., or UNN-FLANGE BLOCKBUSTER 1400 SCRIES as menufactured by Ford Meric Box. Can dishall be for use on ductile iron pipe conforming to ANSI/WWA C151I/A21.51, for nominal pipe sizes 3" through 48".
- e. Existing ductile from systems for restraining push-on pipe bells shall be MEGALUG SERIES 1100HD or FORD SERIES 1390.
- Existing ductile iron systems requiring restraint shall be MEGALUG SERIES 1100SD (split MEGALUG) for mechanical joints.
- Ductile iron water main to be Class 52. All ductile iron pipe is to be encased in polyethylene film Polyethylene encasement to be installed in accordance with ANSI/AWWA C105/A21.5-05.
- A exist already record drawing shall be given to the City of Naproville argon complains of improvements showing, the elevation end footable feet to the potent of all most and existing features including fire hybrane, value boses and vaults. Inestipo elevers, under service corporation alogs, exter main filtingsbends, manufaces, sanitary service ways (measured from downstream manuface), and absorbed vetter or sanitary service lines. All Reviolations should be referenced to the same benchmark datum as the original design plans. Horizontal ties shall be referenced to be lines, back of our by, or property company.
- All sanitary sewor piping shall be PVC pipe meeting the requirements of ASTM D-2241 with join's conforming it ASTM D-3139. All sentary sewor fittings shall be PVC meeting the following requirements: 4" to 12" shall be injection Models fittings meeting ASTM D-2241, creater than 12" shall be Fabricated Fittings meeting ASTM D-2241 or C905. Minimum pressure rating shall be 150 psi.
- The valves less than 16" shall be standard pattern, gate valves and shall have the name or mark of the manufacturer, size and working pressure plainty cast in relised listers on the valve body. Valves may be approved from one of the following manufacturers: American, Clow, Watercus or Kennedy.
- Starless steel nuts, botis T-botis, and washers. Type 304 or better, will be required on all water main installations. This would apply to hydrank, bupping sheeves, swifes, fillings, restriant, and other appartenances buried or in water vaules. Mechanical joins and restrict glands require 20% starless seller 1-60s. An ani-re-level compound shall be factory applied to nuts or bots any denings to this coating shall be repair with field applied approved anti-sere compound that is a mitjodorum-base bitnerial. Bost News-Seze or approved equal.
- The contractor shall rotate and/or adjust any existing and/or new hydrant to the satisfaction of the Department of Public Utilities.
- Water mains that has subjected to a hydrostatic-bakage test in accordance with Naparvilla Standard Specifications. That pressure shall be no best than 150 paid for a period of bours and not up by prime than a 5-psi, uturing the test. The test gauge shall be approved by the City and shall be dyscen or of Hibd. with a range of not more than 100 psi and interments not greater than 15 psi. 4 minimizer dist size. Wheter recovery test shall be considered at the end of the testing period to show actual beaking and that the water main did not have too much trapped air in the testing service.
- The City of Naponville Public Utilities does not guarantee that any valve or fitting in the existing water distrib system will field against a hydrostational season test. The Contractor is solicity responsible for providing and acceptable pressure test which shall include provisions around existing valves and fittings.
- Fire hydrant should be bagged 'NOT IN SERVICE' until all testing and disinfection has been completed and new water main section is service.
- p. Sanitary sewer and water shall be constructed, tested, and placed into service in accordance with City of Naperville Standard Specification and Specifications for Water and Sewer Main Construction in ■inois, Latest Edition.
- Water service line smaller than 3" shall be type K copper. If joints are required due to length of service, then only compression type coupling shall be permitted. No soldered or flared type joints are allowed. All sentiary manholes shall be leasted for leakage by vacuum testing. The methode frame and adjusting rings shall be in place when leading. Any belies shall be repaired from section of manhole- patching inside of menhole shall not be occopitable. A vacuum of 10° (258 mm) High after be place on the manhole and the time sail bor measured for the vacuum to drop to 9° (229 mm) Hig. The vacuum shall not drop below 9° (229 mm) Hig. The vacuum shall not drop below 9° (229 mm) Hig. for the following time periodict for each size of manneds:
- The contractor shall provide internal idelvised inspection of all installed sanitary sewer, blensh, manholes and connections to the public system. Following completion of betwing yout, the contractor shall submit video recordings on DVO or fash drive sharp with a comprehensive betwing report which will indicate the bostion. footages and nature of any defects. Prior to final acceptance, these defects shall be repaired to the satisfaction of the Veter/WesterAusteadt Dully and re-flewised.
- Contractor work hours are only allowed from 7:00 a.m. to 5:00 p.m., Monday through Saturday. No work shall be permitted on Sundays.
- Sanitary pipes with less than 4 feet or more than 25 feet of cover shall be constructed of duetile iron piping (Class 50, minimum) and encased in polywrap.
- All excavations more than 20 feet deep must be protected by a system designed by a registered professional engineer.
- Contractor shall maintain 2' minimum clearance between existing utilities and new foundations and underground facilities. In areas where foundations and underground facilities are proposed adjacent to existing utilities, the contractor shall pot hide by exculum excavation or hand excavation to locate the existing utility to verify minimum.
- Fences shall be installed a minimum of 5 feet from any water or sanitary mains when running parallel with them. Where fences are installed crossing water or sanitary mains, the posts shall be located to have the main between them.
- aa. Sanitary Force Main Force man shall be tested a minimum of 1 hour at 1.5 the shut off head of the pump, 2.5 times the operating pressure, or 20 ps whichever is greatest. Allowable linkage shall be in accordance with section 41.2.146 or the standard spooffactions for wreat and sever coordinations.

## **DUTY TO INDEMNIFY**

- THE CONTRACTOR SHALL DETEND, INDEMNITY, KEET AND SAVE HARMLESS THE OTITY CLIENT, AND ENGINEER, AND CHIENCE AND CHI
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS & METHODS OF CONSTRUCTION AND FOR PROVIDING AND MAINTAINES ADEQUATE SERVE, BARRICADES, FENDING, TRAFFIC CONTROL DEVICES AND MEASURES, AND ALL OTHER MEASURES THAT ARE RECESSARY TO PROTECT THE SAFETY OF THE SITE AT ALL





VILL PRELIM REV. #1 VILL PRELIM. REV. #2

> PRELIMINARY **ENGINEERING**

## CAR WASH FACILITY

1492 W. OGDEN AVE. NAPERVILLE, IL 60540

PROJECT #:

SPECIFICATIONS

**C-2** 

