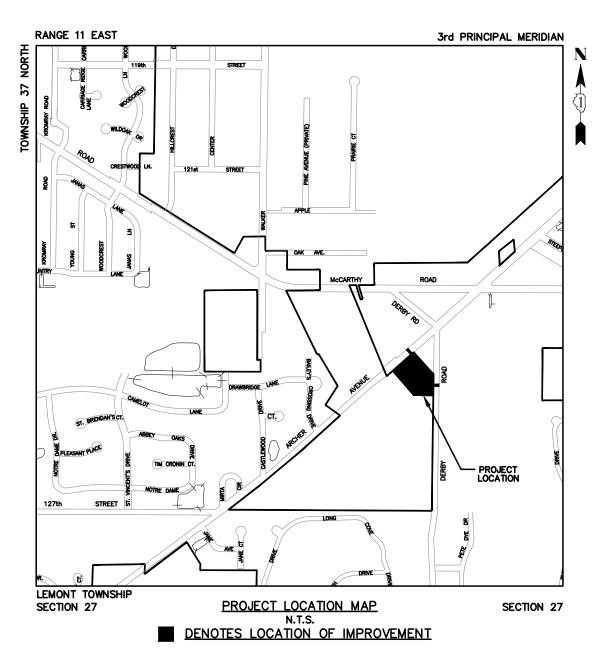
# VILLAGE OF LEMONT, ILLINOIS 1.5 M.G. ELEVATED WATER STORAGE TANK 12421 SOUTH ARCHER AVENUE



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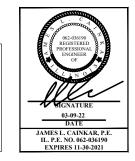
2.) GENERAL CONSTRUCTION NOTES, STANDARD SYMBOLS
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PLAN: ELEVATED TANK SITE PLAN

TANK CONSTRUCTION DETAILS

J.U.L.I.E.
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UTILITY
LOCATION
INFORMATION FOR
EXCAVATION
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VILLAGE OF LEMONT, ILLINOIS
1.5 M.G. ELEVATED WATER STORAGE TANK

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# **GENERAL CONSTRUCTION NOTES**

## CARE IN EXCAVATION

CARE SHALL BE EXERCISED BY THE CONTRACTOR IN CARRYING OUT EARTH AND/OR TRENCHING OPERATIONS SO THAT LOCAL UTILITY SERVICES, WATER VALVES, MANHOLES, CATCH BASINS, INLETS, BUFFALO BOXES, AND OTHER STRUCTURES ARE NOT DAMAGED OR REMOVED. ANY DAMAGE DONE BY THE CONTRACTOR, WHETHER THE STRUCTURE OR SERVICE IS VISIBLE AT THE GROUND SURFACE OR NOT, SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

#### NOTIFICATION OF PUBLIC UTILITIES

PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OFFICIALS OF THE PUBLIC WORKS DEPARTMENT OF THE LOCAL MUNICIPALITY, J.U.L.I.E. AT 1-800-892-0123 OR 811, AND OTHER PUBLIC AND PRIVATE UTILITIES SO THAT ARRANGEMENTS CAN BE MADE TO LOCATE THEIR VARIOUS FACILITIES WITHIN THE LIMITS OF CONSTRUCTION UNDER THIS CONTRACT, AS WELL AS TO PROVIDE ADEQUATE PROTECTION AND INSPECTION THERETO. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES IN THE FIELD.

# TRAFFIC CONTROL DEVICES

BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 107.14 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

## **EXCAVATED MATERIALS**

AS A PROVISION OF THIS CONTRACT, THE CONTRACTOR WILL BE REQUIRED TO DISPOSE OF ALL SURPLUS TRENCH SPOIL MATERIALS OFF THE SITE AS WORK PROGRESSES. THE TEMPORARY STOCKPILING OF THIS MATERIAL ON THE PROJECT SITE WILL NOT BE ALLOWED.

# PROTECTION OF SIGNS AND PROPERTY

ALL TRAFFIC SIGNS, STREET SIGNS, ETC., THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED AND PLACED AT NEW LOCATIONS AS DESIGNATED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. IN ADDITION, ALL MAIL BOXES THAT INTERFERE WITH CONSTRUCTION SHALL BE SIMILARLY RELOCATED AT NO ADDITIONAL COST IN ACCORDANCE WITH ARTICLES 107.20 AND 107.21 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

## SUPERINTENDENCE

SPECIAL ATTENTION IS DRAWN TO ARTICLE 105.06 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WHICH REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HANDING CONTROL OF ALL THE WORK AS THE AGENT OF THE GENERAL CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

# SCHEDULE OF OPERATIONS

THE CONTRACTOR SHALL SUBMIT IN WRITING A "SCHEDULE OF OPERATIONS" SHOWING APPROXIMATE DATES FOR COMMENCING AND COMPLETING VARIOUS PHASES OF CONSTRUCTION INCLUDED IN THE CONTRACT. PRIOR TO COMMENCING ANY CONSTRUCTION UNDER THIS CONTRACT, THE SCHEDULE SHALL HAVE THE APPROVAL OF THE ENGINEER AND THE DATE FOR STARTING SHALL BE MUTUALLY AGREED UPON BETWEEN THE CONTRACTOR AND THE ENGINEER.

#### INCIDENTAL CONSTRUCTION

WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS, AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT, THE WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

#### PROJECT SAFETY

THE CONTRACTOR SHALL COMPLY WITH AND OBSERVE THE RULES AND REGULATIONS OF O.S.H.A. AND APPROPRIATE AUTHORITIES REGARDING SAFETY PROVISIONS. THE CONTRACTOR, ENGINEER, AND OWNER SHALL EACH BE RESPONSIBLE FOR THEIR OWN RESPECTIVE AGENTS AND EMPLOYEES.

THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS, OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE DOCUMENTS AND SPECIFICATIONS.

# UTILITY INCIDENTALS

THE COST OF SAFE GUARDING, PROTECTING & MAINTAINING EXISTING WATER MAIN, WATER SERVICES, SANITARY SEWER MAIN, SANITARY SEWER SERVICES, AND GAS SERVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

# STANDARD SYMBOLS

	CENTER LINE	<b>\$</b>	UTILITY POLE	=======	EXISTING CULVERT
	PROPERTY LINE	ф→	UTILITY POLE With GUY WIRE	<b>&gt;===</b>	PROPOSED CULVERT
<b></b> →	PROPERTY CORNER, IP (Iron Pipe)	<b>φ</b> —α	UTILITY POLE With STREET LIGHT		EXISTING CURB AND GUTTER
	IR (Iron Rod)	∞–α	EXISTING STREET LIGHT		PROPOSED CURB AND GUTTER
	RAILROAD TRACK	<sub>6</sub> •− <b>≭</b> (	PROPOSED STREET LIGHT STANDARD	ww	EXISTING WATER MAIN
	PROPOSED PROFILE	G <del>-</del> ■	(G) INDICATES GROUND ROD LOCATION PROPOSED STREET LIGHT STANDARD	—w—w—	PROPOSED WATER MAIN
	EXISTING PROFILE	G <b>–</b>	(G) INDICATES GROUND ROD LOCATION	—	EXISTING GAS MAIN
	FENCE	Ø	EXISTING BOLLARD	\$2555	STREAM
₩ 12′ ₩ Ev.	TREES (Dia.) EVERGREEN (Ev.)	<b>♦</b>	TRAFFIC SIGNAL POST	<b>₹</b> }==={(	HEADWALL AND WINGWALL
B Ev.	BUSHES EVERGREEN (Ev.)	$\rightarrow$	DIRECTION OF FLOW	INLET	STRUCTURE
	HEDGE	***	SUMMIT	100.50 100.00	PROPOSED TOP OF CURB ELEVATION PROPOSED GUTTER FLOW LINE ELEVATION
0000000	GUARD POSTS		EXISTING INLET (A) Adjust (F) Fill	<u>25+50</u>	STATION
0000000	GUARD RAIL		PROPOSED INLET	٥.	PARKING METER
⊗G	EXISTING VALVE (W) Water (G) Gas	$\overline{\bigcirc_{\Lambda}}$	EXISTING CATCH BASIN (A) Adjust	8	MAIL BOX
<b>②</b>	PROPOSED VALVE		(R) Reconstruct (F) Fill		EXISTING HANDHOLE
⊗w	EXISTING VALVE IN VAULT (W) Water (G) Gas	·	PROPOSED CATCH BASIN		PROPOSED HANDHOLE
<b>②</b>	PROPOSED VALVE IN VAULT	<b>⊚</b> A	EXISTING MANHOLE (A) Adjust (R) Reconstruct (F) Fill	⊔ൃ	EXISTING JUNCTION BOX
M	METER (M) Electrical (E) Telephone (T) VAULT	•	PROPOSED MANHOLE	ال≡	PROPOSED JUNCTION BOX
<b>\$</b>	DOMESTIC SERVICE BOX (W) WATER (G) GAS	<b>()</b>	PROPOSED MANHOLE - DROP SECTION		EXISTING CONTROLLER CABINET
	PROPOSED DOMESTIC SERVICE BOX	634.56	TOP OF MANHOLE ELEVATION	=	PROPOSED CONTROLLER CABINET
Q	EXISTING FIRE HYDRANT	624.56	SEWER FLOW LINE ELEVATION		PROPOSED UNIT DUCT, SIZE AS NOTED
	PROPOSED FIRE HYDRANT	$\rightarrow$	EXISTING SANITARY SEWER		PROPOSED ELECTRIC CABLE, SIZE AS NOTED
$\Theta$	DOMESTIC LIGHT	<del></del>	PROPOSED SANITARY SEWER	36 LF 2" G.S., P.	PROPOSED G.S. CONDUIT, P(PUSHED), T(TRENCH)
000	TRIPLE BASIN	-[-[-	EXISTING STORM SEWER		
			PROPOSED STORM SEWER		HANDICAP RAMP
			EXISTING COMBINED SEWER	1	
		<del></del>	PROPOSED COMBINED SEWER	¬ ₩	



VILLAGE OF LEMONT, ILLINOIS

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GENERAL CONSTRUCTION NOTES
STANDARD SYMBOLS

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# WATER MAIN CONSTRUCTION NOTES

- 1) USE MEGALUG RETAINING GLANDS AND CAST IN PLACE THRUST BLOCKS AT ALL PIPE FITTINGS.
- 2) ALL MECHANICAL JOINT FITTINGS SHALL HAVE STAINLESS STEEL BOLTS AND NUTS.
- 3) PROVIDE 100% SELECTED GRANULAR BACKFILL FOR ALL WATER MAIN WORK. ALL UTILITY TRENCHES SHALL BE THOROUGHLY WATER JETTED FOR SETTLEMENT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

# <u>IEPA REQUIREMENTS FOR</u> <u>SEPARATION OF SEWERS AND WATER MAINS</u>

Section 653.119 Protection of Water Main and Water Service Lines

Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains as follows:

- a) Water Mains
- 1) Horizontal Separation
- Water mains shall be laid at least ten feet horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
- B) Water mains may be laid closer than ten feet to a sewer line when
  - l) local conditions prevent a lateral separation of ten feet.
  - II) the water main invert is at least 18 inches above the crown of the sewer: and
  - III) the water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- C) Both the water main and drain or sewer shall be constructed of slip—on or mechanical joint cast or ductile iron pipe, asbestos—cement pressure pipe prestressed concrete pipe, or PVC pipe meeting the requirements of Section 653.111 when it is impossible to meet (A) or (B) above. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.
- 2) Vertical Separation:
- A) A water main shall be laid so that its invert is 18 inches above the crown of the drain or sewer whenever water mains cross storm sewer, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within ten feet horizontal of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.
- Both the water main and sewer shall be constructed of slip—on or mechanical joint cast or ductile iron pipe, asbestos—cement pressure pipe, prestressed concrete pipe, or PVC pipe meeting requirements of Section 653.111 when:
  - it is impossible to obtain the proper vertical separation as described in (A) above; or
  - II) the water main passes under a sewer or drain.
- C) A vertical separation of 18 inches between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main.
- D) Construction shall extend on each side of the crossing until the normal distance from the water main at the sewer or drain lines is at least ten feet.
- b) Water Service Lines:
- The horizontal and vertical separation between water service lines and all storm sewers, sanitary sewers, combined sewers or any drain or sewer service connection shall be the same as water main separation described in (a) above.
- Water pipe described in (a) above shall be used for sewer service lines when minimum horizontal and vertical separation cannot be maintained.
- c) Special Conditions Alternate solutions shall be presented to the Agency when extreme topographical, geological or existing structural conditions make strict compliance with (a) and (b) above technically and economically impractical. Alternate solutions will be approved provided watertight construction structurally equivalent to approved water main material is proposed.
- d) Water mains shall be separated from septic tanks, disposal fields and seepage beds by a minimum of 25 feet.
- e) Water mains and water service lines shall be protected against entrance of hydrocarbons through diffusion through and material used in construction of the line.

All manholes shall be inspected and leakage tested for watertightness in accordance with ASTM C969-94-- "Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines", Vol. 04.05, Chemical Resistant Materials, Vitrified Clay, Concrete, Fiber-Cement Products; Mortars; Masonry (1996) (no later editions or amendments) or ASTM C1244-93 "Standard Test Method for Concrete Sewer Manholes by the Negative Pressure (Vacuum) Test", Vol. 04.05, Chemical Resistant Materials, Vitrified Clay, Concrete, Fiber-Cement Products; Mortars; Masonry (1996) (no later editions or amendments) prior to placing into service.



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WATER MAIN
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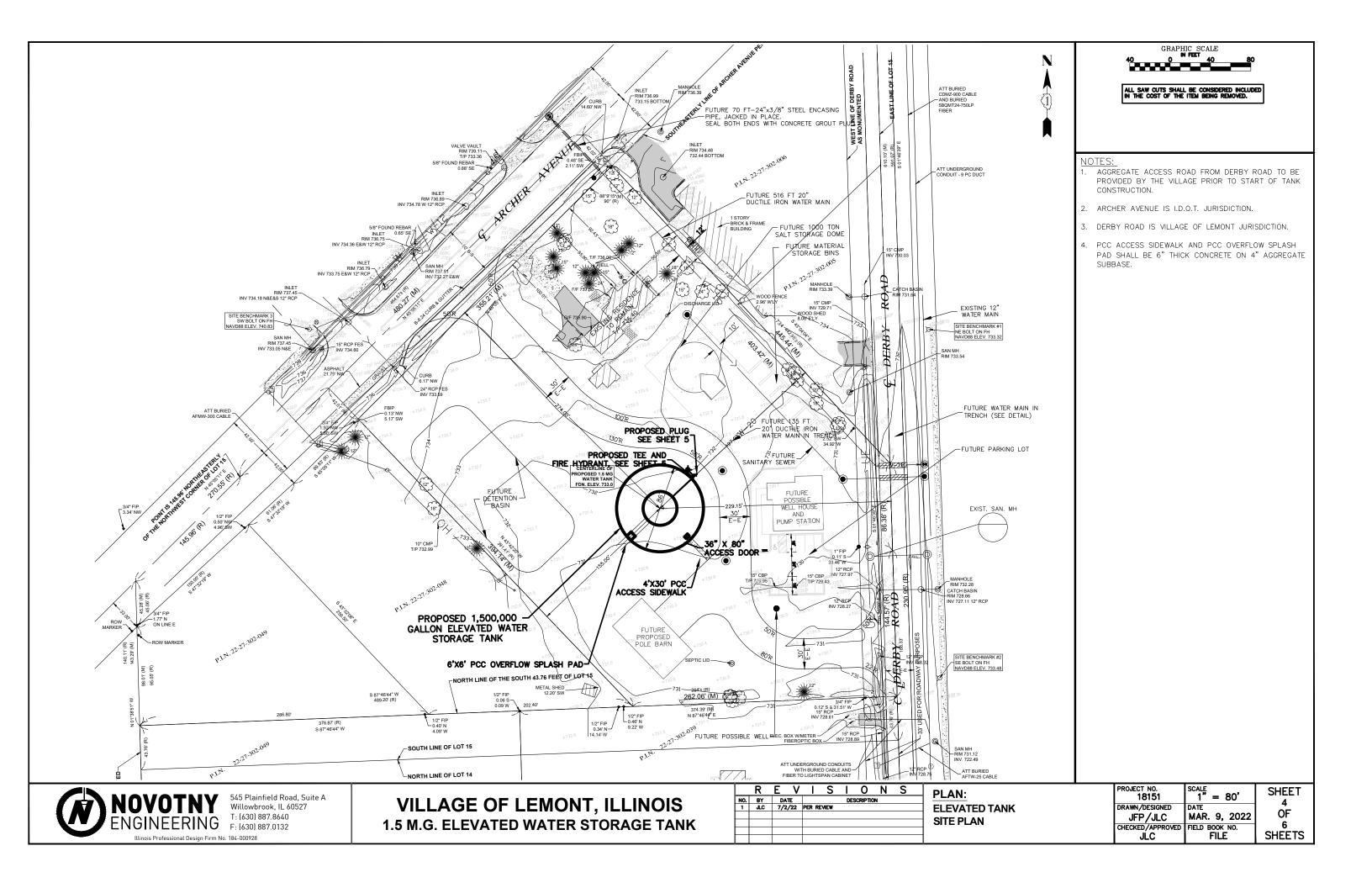
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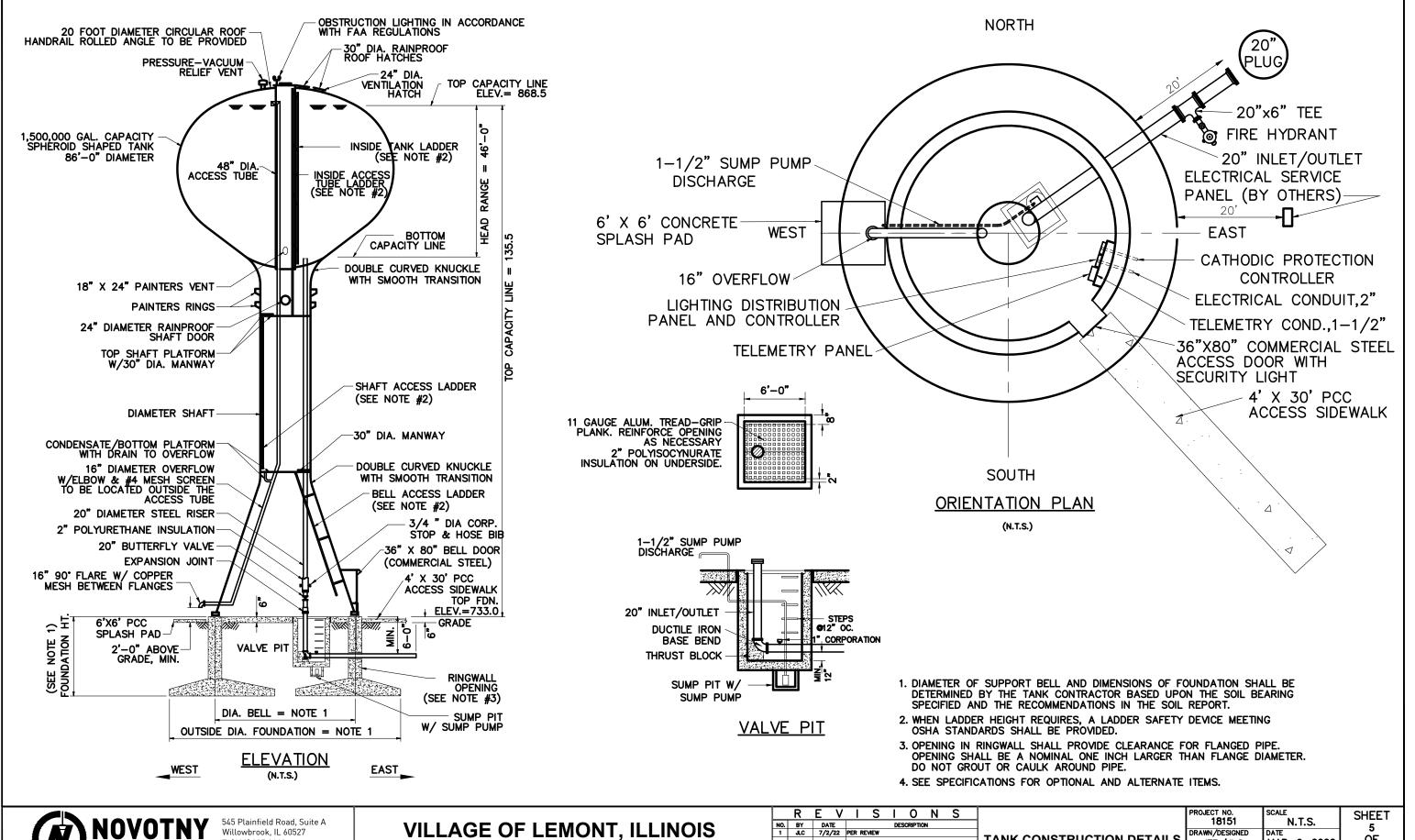
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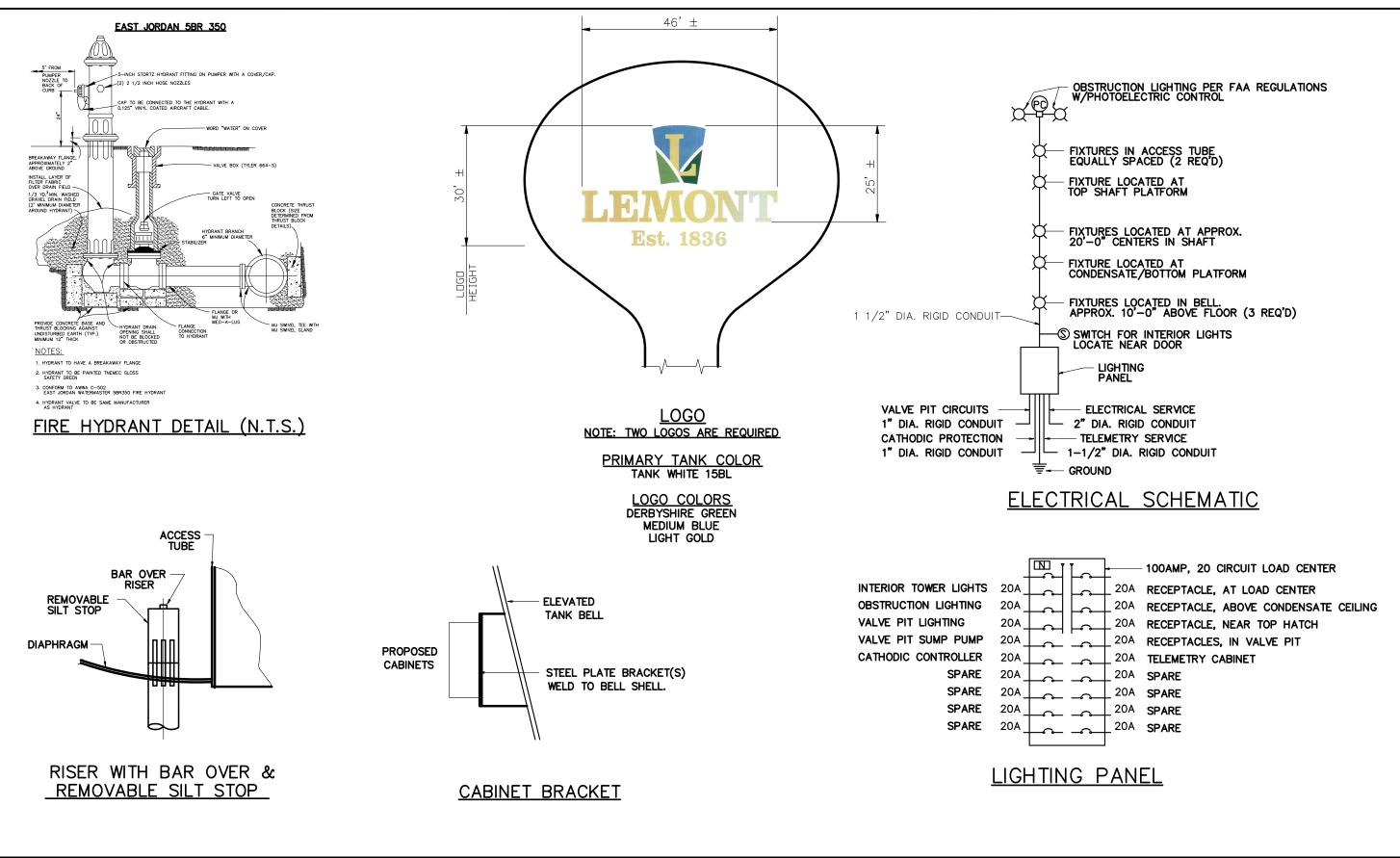
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