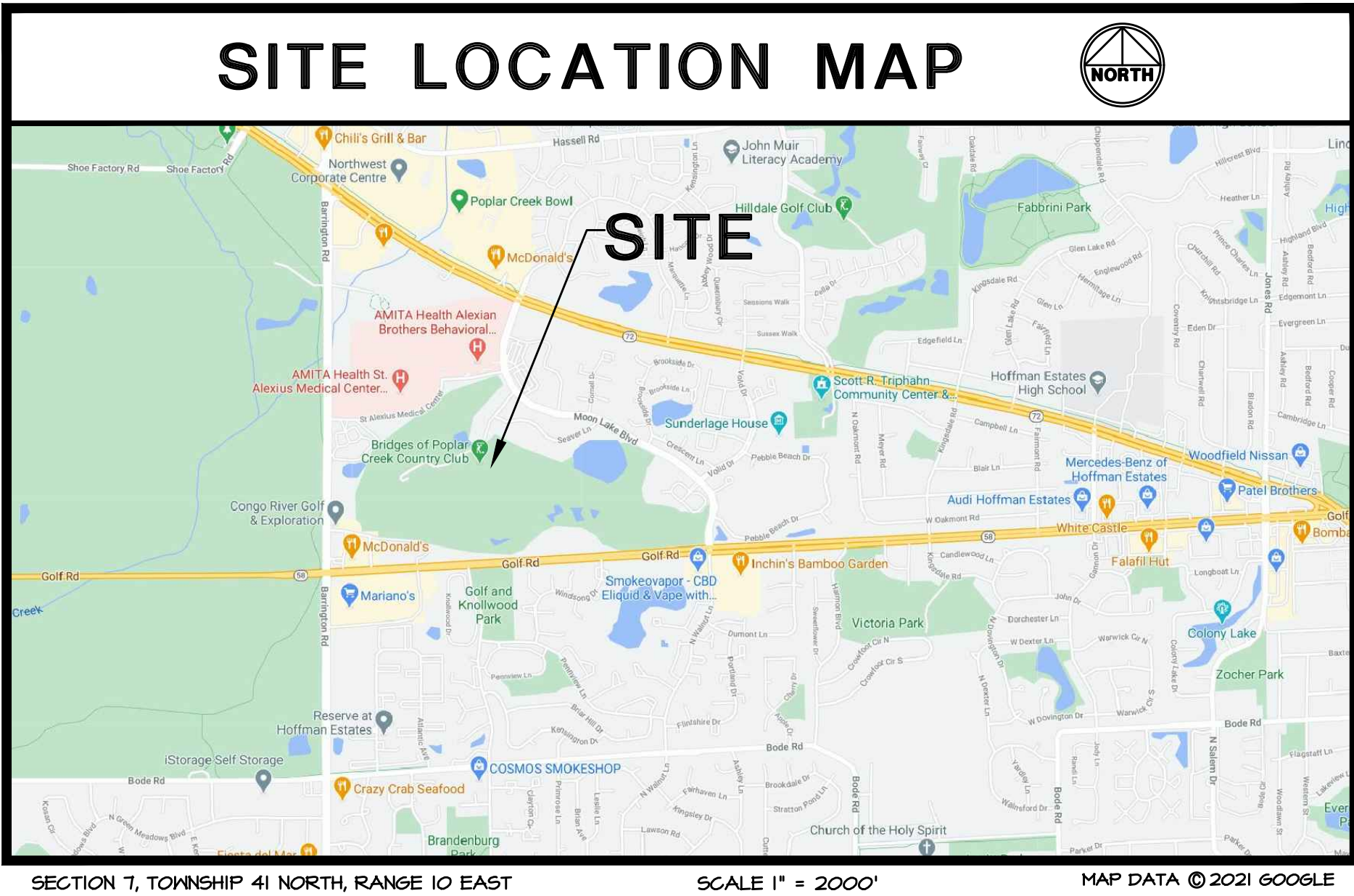


BRIDGES TOP TRACER BATHROOM UTILITIES

1400 POPLAR CREEK DRIVE


HOFFMAN ESTATES, IL 60169

DRAWING INDEX		
SHEET	DESCRIPTION	DATE
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C-2.0	SITE GRADING PLAN	3-1-22
C-3.0	SITE UTILITY PLAN	3-1-22
C-3.1	UTILITY DETAILS	3-1-22
C-4.0	STORMWATER POLLUTION PREVENTION PLAN	3-1-22
C-4.1	STORMWATER POLLUTION PREVENTION DETAILS	3-1-22
C-5.0	CONSTRUCTION DETAILS	3-1-22
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C-7.0	MWRD GENERAL NOTES	3-1-22
EX-1.0	PROPOSED CONDITION EXHIBIT	3-1-22
EX-MWRD	MWRD MAINTENANCE EXHIBIT	3-1-22
SUR-1	TOPOGRAPHIC SURVEY	2-11-22



CIVIL ENGINEERING STATEMENT AND SEAL

I, TODD ABRAMS, P.E., DULY LICENSED IN THE STATE OF ILLINOIS BY THE DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION, DO HEREBY STATE THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF DOES CONFORM TO THE AFFLIGABLE BUILDING CODES AND ORDINANCES, AND ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT (410 ILCS 25) AND THE ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400).


DATE: 3-1-22

TODD ABRAMS - ILLINOIS P.E. # 062-061600
DATE OF EXPIRATION - NOVEMBER 30, 2023

CALL JULIE
SIMPLY 811 OR TOLL FREE 1(800)842-0123
OPERATES 24 HOURS A DAY 365 DAYS A YEAR



CALL 1(800)842-0123
48 HOURS BEFORE YOU DIG

CONTRACTOR MUST LOCATE PRIVATE UTILITIES IN AREA
OF CONSTRUCTION PRIOR TO PROCEEDING WITH WORK

SITE DEMOLITION NOTES:

- A. CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- B. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY DEMOLITION PERMITS AND COORDINATE ALL DEMOLITION WITH THE MUNICIPALITY AND OWNERS REPRESENTATIVE TO ENSURE PROTECTION AND MAINTENANCE OF SANITARY AND WATER UTILITIES AS NECESSARY AND TO PROVIDE STORM WATER CONVEYANCE UNTIL NEW FACILITIES ARE CONSTRUCTED, TESTED, AND PLACED IN OPERATION.
- C. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A DAILY PROGRAM OF DUST CONTROL PROCEDURES PRIOR TO DEMOLITION OF ANY STRUCTURES. MODIFICATION OF DUST CONTROL PROCEDURES SHALL BE PERFORMED BY THE CONTRACTOR TO THE SATISFACTION OF THE MUNICIPALITY AND COMPLY WITH THE NPDES II REQUIREMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND THE INDIVIDUAL STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT.
- D. ALL EXISTING TREES, BRUSH AND MISCELLANEOUS VEGETATION TO BE REMOVED OR DEMOLISHED SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR.
- E. VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24' THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.
- F. ALL EXISTING BUILDINGS, FOUNDATIONS, CONCRETE OR ASPHALT PAVEMENT OR WALKS, CURB AND GUTTER AND MISCELLANEOUS STRUCTURES (INCLUDING, BUT NOT LIMITED TO FENCES, POLES, YARD LIGHTS, ELECTRICAL PANELS, AND MISCELLANEOUS DEBRIS) INDICATED TO BE DEMOLISHED SHALL BE REMOVED OR DEMOLISHED AND REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR.
- G. CONTACT GAS COMPANY PRIOR TO DEMOLITION. LOCATION OF EXISTING GAS SERVICES ARE UNKNOWN.
- H. ALL EXISTING TREES SHALL REMAIN UNLESS OTHERWISE NOTED.
- I. ALL EXISTING UTILITIES SHALL REMAIN UNLESS OTHERWISE NOTED.
- J. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
- K. CONTRACTOR SHALL PROVIDE REMOVAL AND REPLACEMENT AND SHORING AS NECESSARY TO MEET OSHA AND LOCAL CODE, AS WELL AS MANUFACTURER'S REQUIREMENTS.
- L. ALL FOUNDATIONS FOR ALL FENCES, SIGNS, ETC. NOTED FOR REMOVAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFFSITE.
- M. PROOF-ROLLING SHALL BE PERFORMED FOR ALL SUBGRADE PRIOR TO CONSTRUCTION OF NEW PAVEMENT. ALL SUBGRADE PROOF-ROLLING SHALL BE WITNESSED AND APPROVED BY A MATERIALS TESTING AGENCY TO BE HIRED BY THE OWNER. CONTRACTOR TO COORDINATE ALL PROOF-ROLLING WITH THE MATERIALS TESTING AGENCY. CONTACT THE ENGINEER AND MATERIAL TESTING AGENCY SO THAT THEY MAY WITNESS THE PROOF ROLL. PROOF ROLL SHALL BE PROVIDED FOR ALL PAVEMENT AREAS SPECIFIED FOR FULL DEPTH REMOVAL AND REPLACEMENT.
- N. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE TOPOGRAPHIC SURVEY LAST DATED 2-II-22, PREPARED BY M-T GROUP. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- O. SEE SHEET SUR-1 TOPOGRAPHIC SURVEY FOR ALL EXISTING LOCATED UTILITY DATA.
- P. CLEAR SITE AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
- Q. ALL ITEMS MARK "EXISTING OR EXISTING TO REMAIN" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
- R. CONTRACTOR TO PROVIDE SOIL TESTING SERVICES FOR COMPLETION OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S LPC-662 AND/OR LPC-663 FORMS AS PART OF THEIR CONTRACT.
- S. ALL EXISTING UTILITIES TO BE ABANDONED IN PLACE SHALL BE CAPPED WITH 2' LONG (MIN) NON-SHRINK CONCRETE MORTAR PLUGS AT BOTH ENDS.
- T. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

EXISTING UTILITY DATA

- 1 RIM=801.08'(STORM)
24" PVC STRUCTURE
INV=800.00'(6" CMP SW)
INV=800.00'(CPP NE)
INV=798.77'(12" CPP NE)
- 2 RIM=803.69'(WATER)
60" CONCRETE STRUCTURE
794.05' AT TOP OF 18" DI NE/SW PIPE
- 3 RIM=801.49'(WATER)
48" CONCRETE STRUCTURE
790.54' AT TOP OF 12" DI NW/SE PIPE
- 4 RIM=804.36'(SAN)
48" CONCRETE STRUCTURE
INV=783.67'(10" CLAY SSW)
INV=783.67'(8" PVC N)
INV=783.67'(8" PVC NE) DROP
INV=776.06'(8" CLAY NE CAPPED) DROP
- 5 RIM=804.46'(SAN)
60" CONCRETE STRUCTURE
798.28' AT TOP OF 8" CLAY SW
798.28' AT TOP OF 8" CLAY NE
STRUCTURE FULL OF
WASTE/GREASE/DEBRIS
- 6 RIM=801.51'(SAN)
48" CONCRETE STRUCTURE
INV=784.73'(8" PVC S & E)
- 7 RIM=793.44'(SAN)
48" CONCRETE STRUCTURE
INV=782.12'(10" CLAY NNE & SW)
INV=782.12'(8" CLAY NW)
- 8 RIM=802.62'(WATER)
48" CONCRETE STRUCTURE
797.57' AT TOP OF 2" LINE NW
STRUCTURE FULL OF WATER
UNABLE TO SEE PIPE
- 9 RIM=803.23'(STORM)
12" CORRUGATED PLASTIC
INV=802.33'(6" CPP NW)
- 10 RIM=803.00'(STORM)
6" HDPE
INV=800.60'(6" SE)
- 11 RIM=803.00'(STORM)
6" HDPE
INV=800.90'(6" SE)
- 12 RIM=803.00'(STORM)
6" HDPE
INV=801.40'(6" NE)
- 13 RIM=803.00'(STORM)
6" HDPE
INV=802.00'(6" NE)
- 14 RIM=801.85'(STORM)
FLO-WELL
6" HDPE
INV=799.25'(6" NW)

PAVEMENT SECTIONS

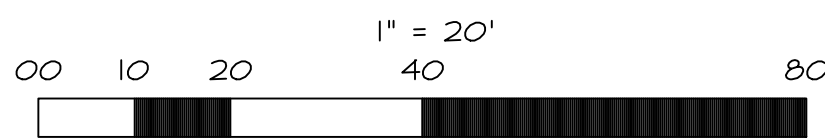
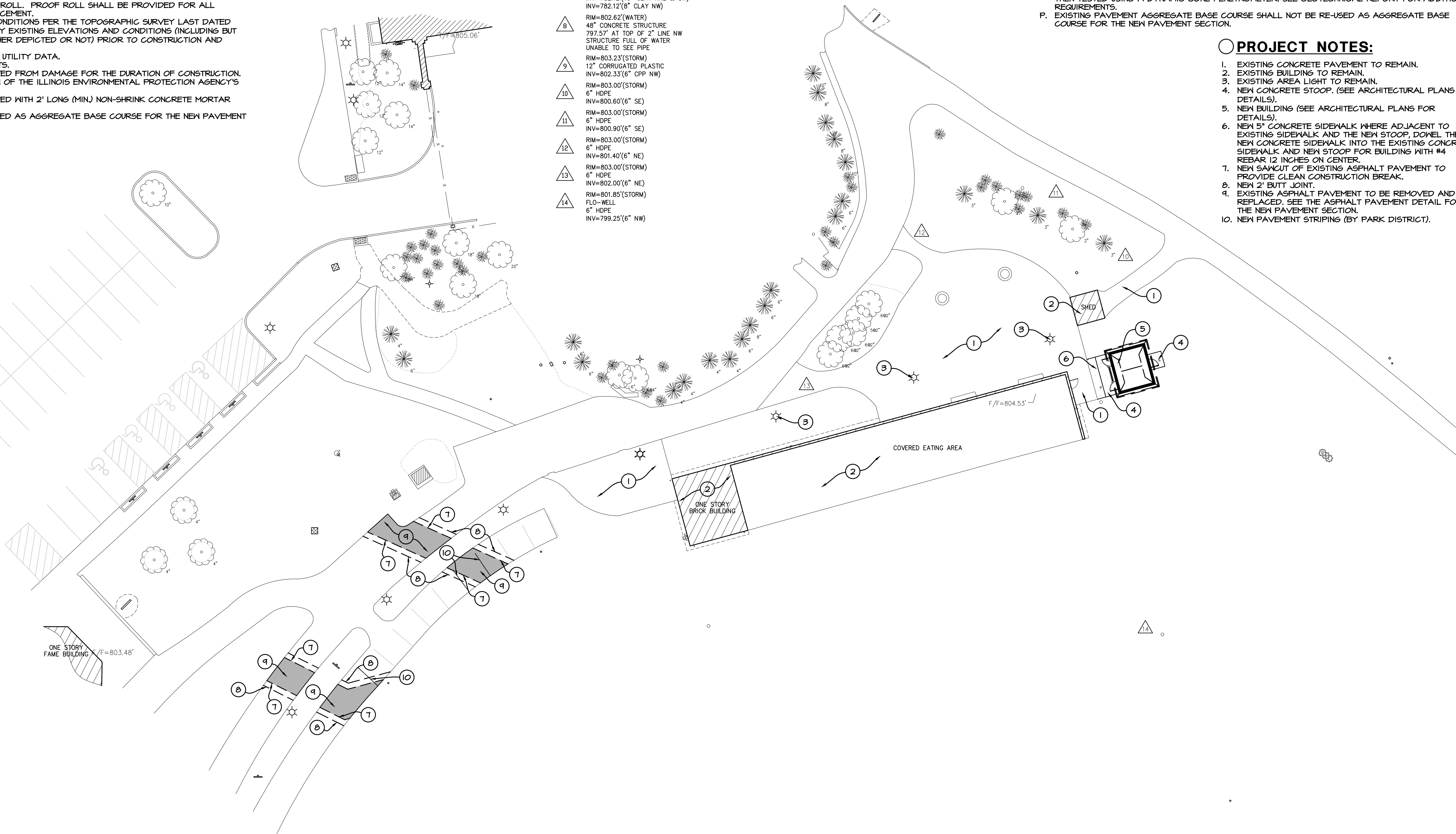
- NEW 5" CONCRETE PAVEMENT
5" PORTLAND CEMENT CONCRETE
4" CA-6
- NEW FULL DEPTH ASPHALT PAVEMENT
1-1/2" HMA SURFACE COURSE
2-1/2" HMA BINDER COURSE
12" CA-6

SITE GEOMETRIC AND DEVELOPMENT NOTES:

- A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE TOPOGRAPHIC SURVEY LAST DATED 2-II-22, PREPARED BY MT GROUP. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- B. ALL DIMENSIONS SHOWN ARE MEASURED FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
- C. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE ARCHITECTURAL PLANS.
- D. SEE THE ARCHITECTURAL PLANS FOR THE DESIGN OF ALL BUILDING ENTRIES.
- E. CONTRACTOR SHALL COORDINATE ALL LANDSCAPING IMPROVEMENTS WITH LANDSCAPE PLANS.
- F. CONSTRUCTION SURVEY AND STAKEOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- G. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
- H. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- I. ASPHALT PAVEMENT MARKINGS SHALL BE MADE WITH HIGH QUALITY PAINT CONFORMING TO ARTICLE 1045.02 OF THE IDOT STANDARD SPECIFICATIONS.
- J. ALL PAINTED CURB ON SITE TO BE REPAINTED FOLLOWING RESURFACING OF THE PARKING LOT. MATCH EXISTING COLOR, REPAINT WITH HIGH QUALITY PAINT.
- K. CONTRACTOR SHALL RESTORE ALL DISTURBED GREEN SPACES WITH 6" OF TOPSOIL, SEED, AND EROSION CONTROL BLANKET. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- L. CONTRACTOR SHALL RE-STRIPE ALL STRIPING DISTURBED WITHIN THE EXISTING ROADWAYS/PARKING LOT TO MATCH EXISTING.
- M. CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR TO LOCATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL CONTACT THE SITE ENGINEER IF A CONFLICT EXISTS.
- N. ALL ITEMS MARKED "EXISTING" TO BE PROTECTED FROM DAMAGE FOR THE DURATION OF CONSTRUCTION.
- O. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- P. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

PROJECT NOTES:

1. EXISTING CONCRETE PAVEMENT TO REMAIN.
2. EXISTING BUILDING TO REMAIN.
3. EXISTING AREA LIGHT TO REMAIN.
4. NEW CONCRETE STOOP. (SEE ARCHITECTURAL PLANS FOR DETAILS).
5. NEW BUILDING (SEE ARCHITECTURAL PLANS FOR DETAILS).
6. NEW 5" CONCRETE SIDEWALK WHERE ADJACENT TO EXISTING SIDEWALK AND THE NEW STOOP. DOWEL THE NEW CONCRETE SIDEWALK INTO THE EXISTING CONCRETE SIDEWALK AND NEW STOOP FOR BUILDING WITH #4 REBAR 12 INCHES ON CENTER.
7. NEW SMCUT OF EXISTING ASPHALT PAVEMENT TO PROVIDE CLEAN CONSTRUCTION BREAK.
8. NEW 2' BUTT JOINT.
9. EXISTING ASPHALT PAVEMENT TO BE REMOVED AND REPLACED. SEE THE ASPHALT PAVEMENT DETAIL FOR THE NEW PAVEMENT SECTION.
10. NEW PAVEMENT STRIPING (BY PARK DISTRICT).



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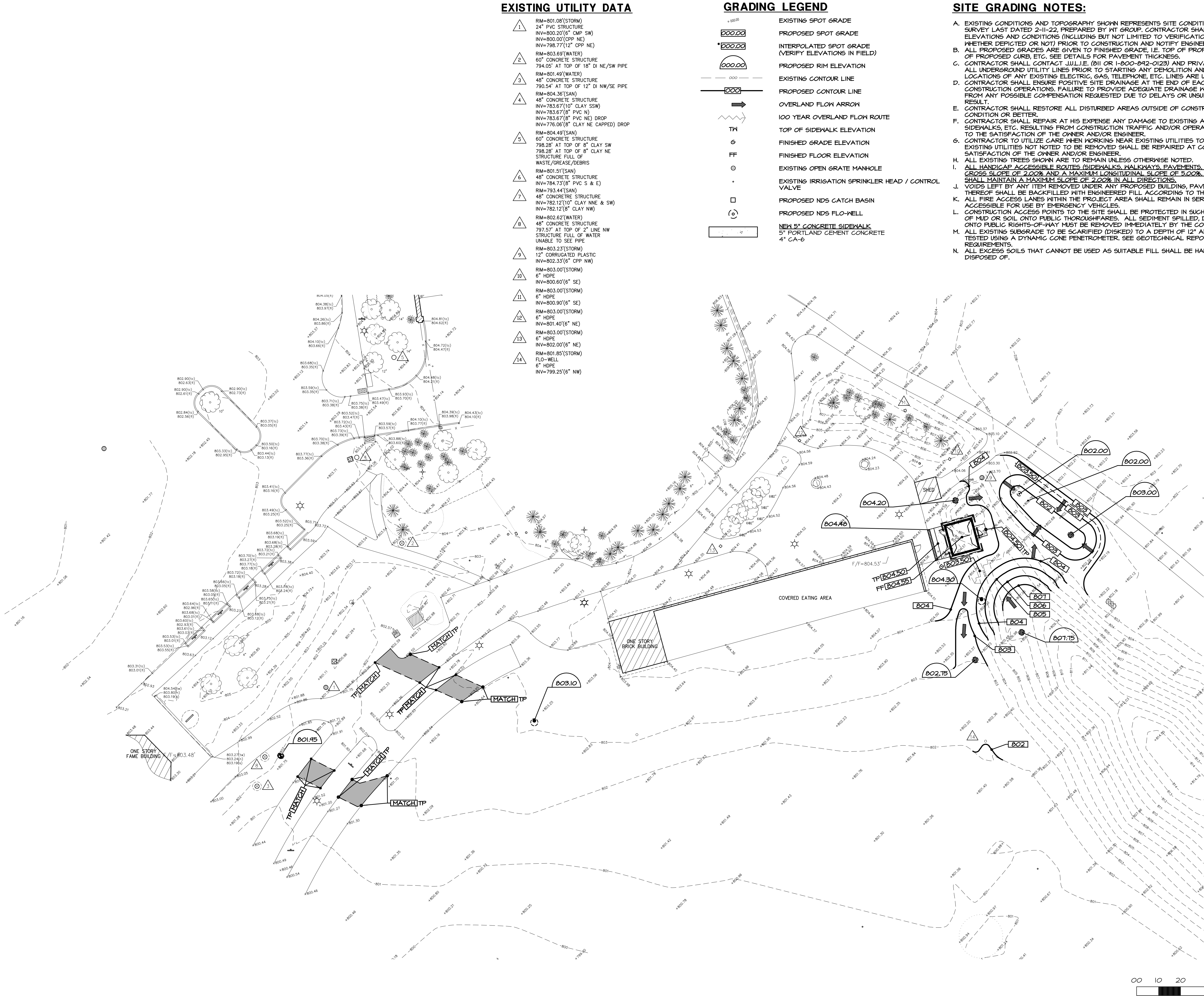
BRIDGES TOP TRACER
BATHROOM UTILITIES
1400 POPLAR CREEK DRIVE
HOFFMAN ESTATES, IL 60169
BRIDGES OF POPLAR CREEK

CHECK: TOA
DRAWN: VE
JOB: C2200007

C-1.0
SITE DEMOLITION PLAN

ISSUE

TO _____ DATE _____
ISSUED FOR BID 3-1-22



EXISTING UTILITY DATA

- 1 RIM=801.08'(STORM)
24" PVC STRUCTURE
INV=800.20'(6" CMP SW)
INV=800.00'(6" CPP NE)
INV=798.77'(12" CPP NE)
- 2 RIM=803.69'(WATER)
60" CONCRETE STRUCTURE
794.05' AT TOP OF 18" DI NW/SW PIPE
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INV=783.67'(8" PVC N)
INV=783.67'(8" PVC NE) DROP
INV=778.06'(8" CLAY NE CAPPED) DROP
- 5 RIM=804.40'(SAN)
60" CONCRETE STRUCTURE
798.28' AT TOP OF 8" CLAY SW
798.28' AT TOP OF 8" CLAY NE
STRUCTURE FULL OF
WASTE/GREASE/DEBRIS
- 6 RIM=801.51'(SAN)
48" CONCRETE STRUCTURE
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6" HDPE
INV=802.00'(6" NE)
RIM=801.85'(STORM)
FLO-WELL
6" HDPE
INV=799.25'(6" NW)
- 9
- 10
- 11
- 12
- 13
- 14

GRADING LEGEND

- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- INTERPOLATED SPOT GRADE
(VERIFY ELEVATIONS IN FIELD)
- PROPOSED RIM ELEVATION
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- OVERLAND FLOW ARROW
- 100 YEAR OVERLAND FLOW ROUTE
- TOP OF SIDEWALK ELEVATION
- FINISHED GRADE ELEVATION
- FINISHED FLOOR ELEVATION
- EXISTING OPEN GRATE MANHOLE
- EXISTING IRRIGATION SPRINKLER HEAD / CONTROL VALVE
- PROPOSED NDS CATCH BASIN
- PROPOSED NDS FLO-WELL
- NEW 5" CONCRETE SIDEWALK
5" PORTLAND CEMENT CONCRETE
4" CA-6

SITE GRADING NOTES:

- A. EXISTING CONDITIONS AND TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS PER THE TOPOGRAPHIC SURVEY LAST DATED 2-11-22, PREPARED BY MT GROUP. CONTRACTOR SHALL FIELD VERIFY EXISTING ELEVATIONS AND CONDITIONS (INCLUDING BUT NOT LIMITED TO VERIFICATION OF CONTROL AND ALL UTILITIES WHETHER DEPICTED OR NOT) PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- B. ALL PROPOSED GRADES ARE GIVEN TO FINISHED GRADE, I.E. TOP OF PROPOSED ASPHALT, CONCRETE, TOP OF PROPOSED CURB, ETC. SEE DETAILS FOR PAVEMENT THICKNESS.
- C. CONTRACTOR SHALL CONTACT JULLIE (811 OR 1-800-842-0123) AND PRIVATE LOCATING SERVICE TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO STARTING ANY DEMOLITION AND/OR EXCAVATION. EXACT LOCATIONS OF ANY EXISTING ELECTRIC, GAS, TELEPHONE, ETC. LINES ARE UNKNOWN.
- D. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.
- E. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- F. CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- G. CONTRACTOR TO UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- H. ALL EXISTING TREES SHOWN ARE TO REMAIN UNLESS OTHERWISE NOTED.
- I. ALL HANDICAP ACCESSIBLE ROUTES (SIDEWALKS, WALKWAYS, PAVEMENTS, ETC.) SHALL MAINTAIN A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00%. ACCESSIBLE PARKING STALLS SHALL MAINTAIN A MAXIMUM SLOPE OF 2.00% IN ALL DIRECTIONS.
- J. VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED BUILDING, PAVEMENT, OR WALK OR WITHIN 24' THEREOF SHALL BE BACKFILLED WITH ENGINEERED FILL ACCORDING TO THE GEOTECHNICAL REPORT.
- K. ALL FIRE ACCESS LANES WITHIN THE PROJECT AREA SHALL REMAIN IN SERVICE, CLEAN OF DEBRIS, AND ACCESSIBLE FOR USE BY EMERGENCY VEHICLES.
- L. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
- M. ALL EXISTING SUBGRADE TO BE SCARIFIED (DISKED) TO A DEPTH OF 12" AND RE-COMPACTED, AND THEN TESTED USING A DYNAMIC CONE PENETROMETER. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- N. ALL EXCESS SOILS THAT CANNOT BE USED AS SUITABLE FILL SHALL BE HAULED FROM THE SITE AND LEGALLY DISPOSED OF.

WT GROUP
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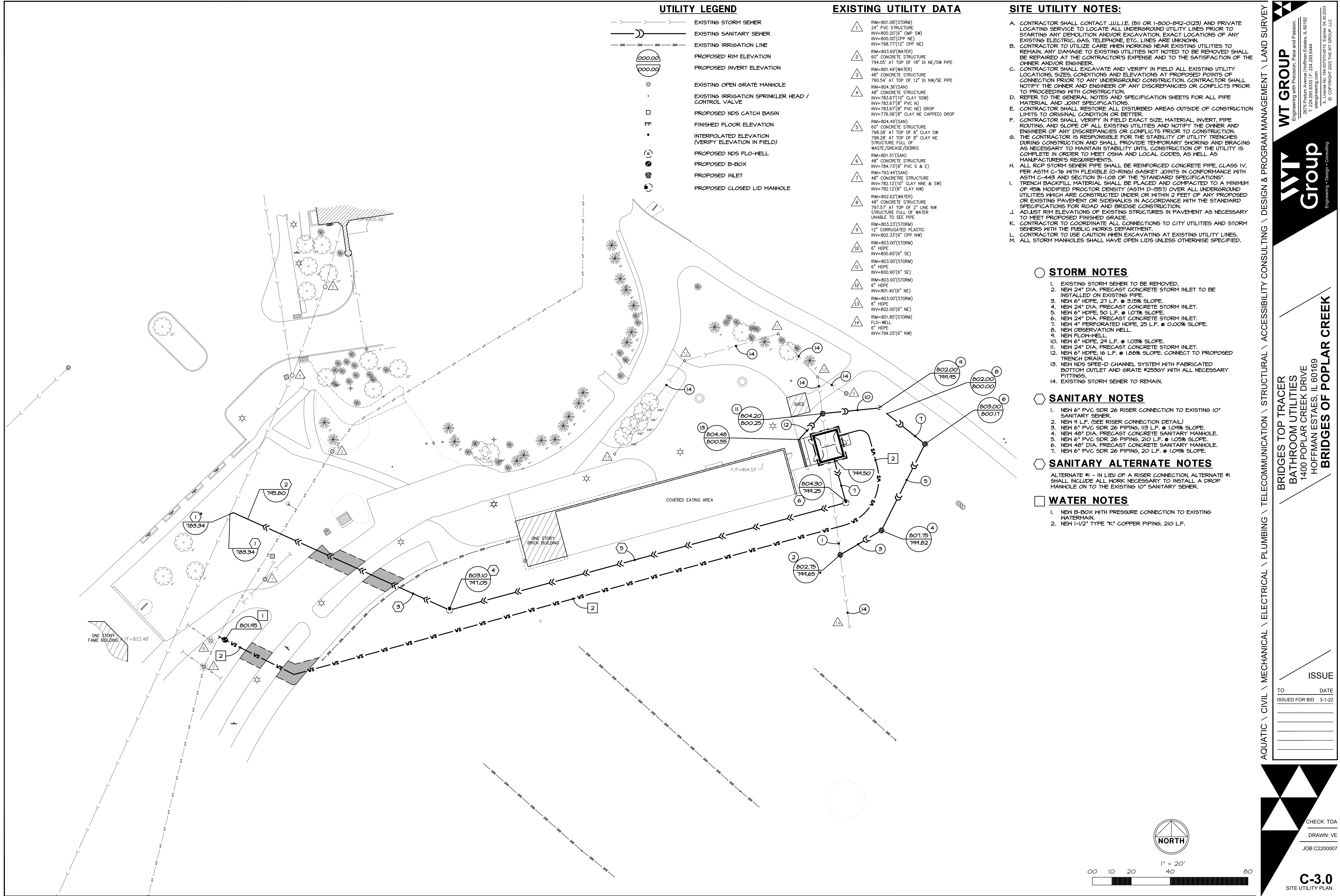
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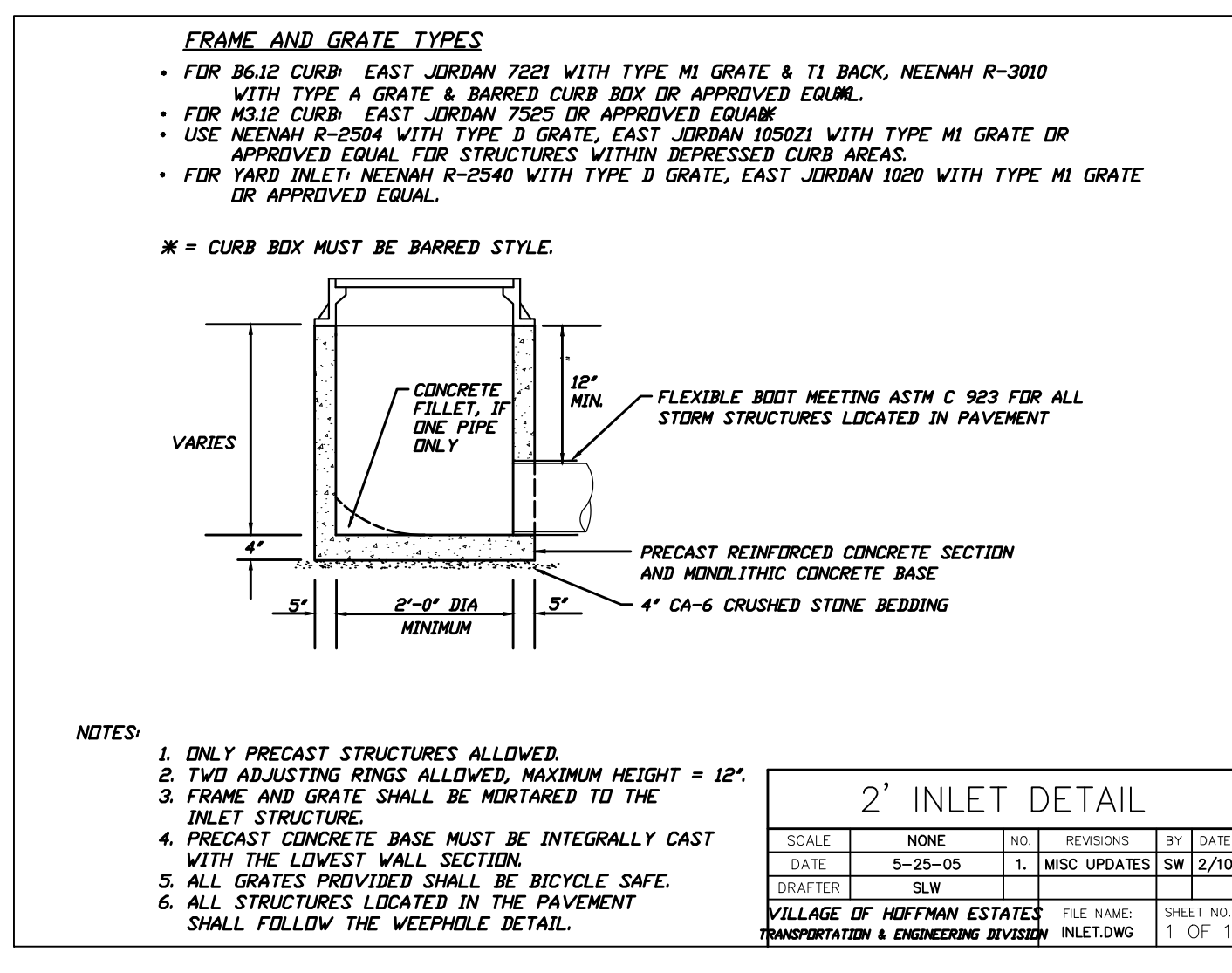
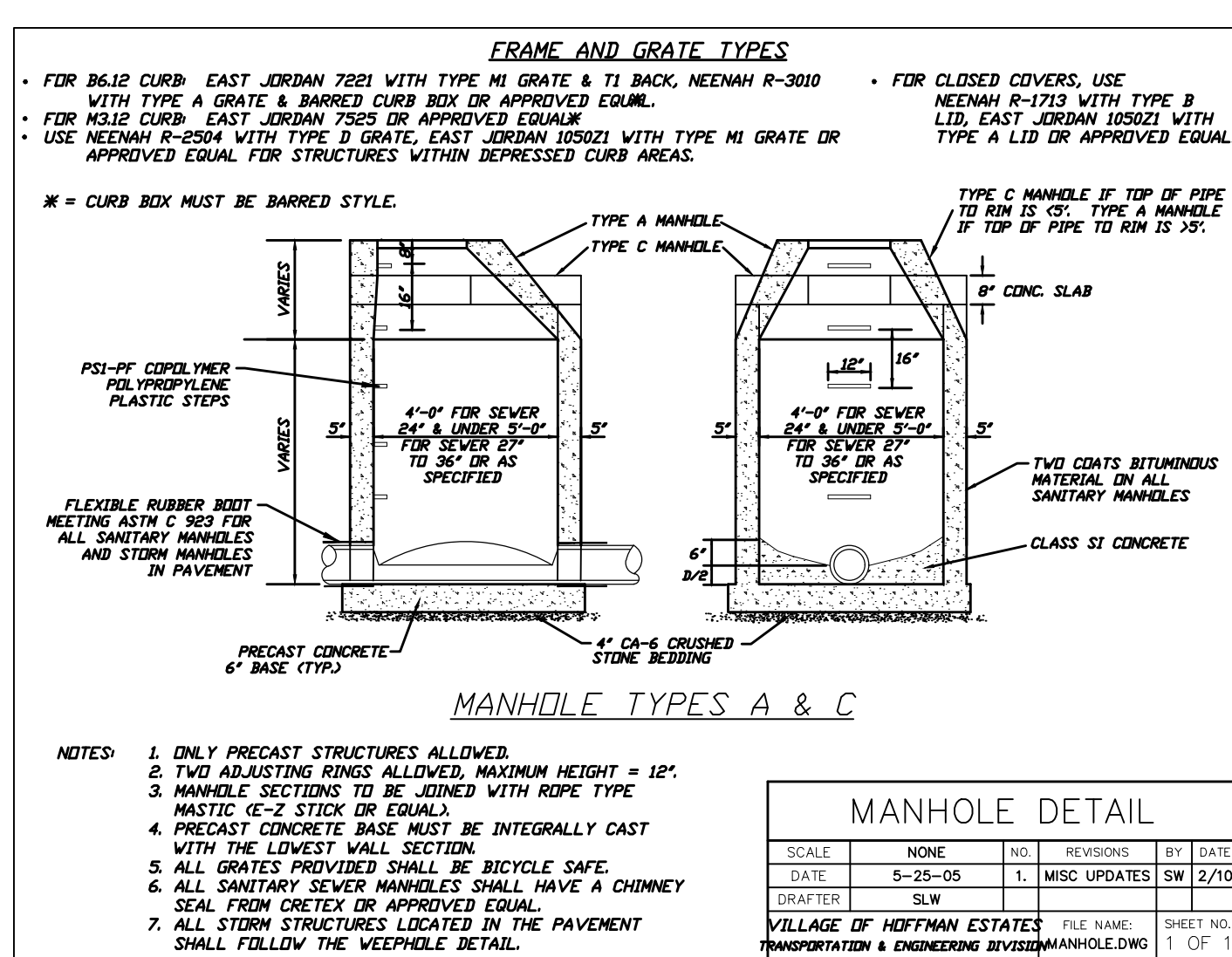
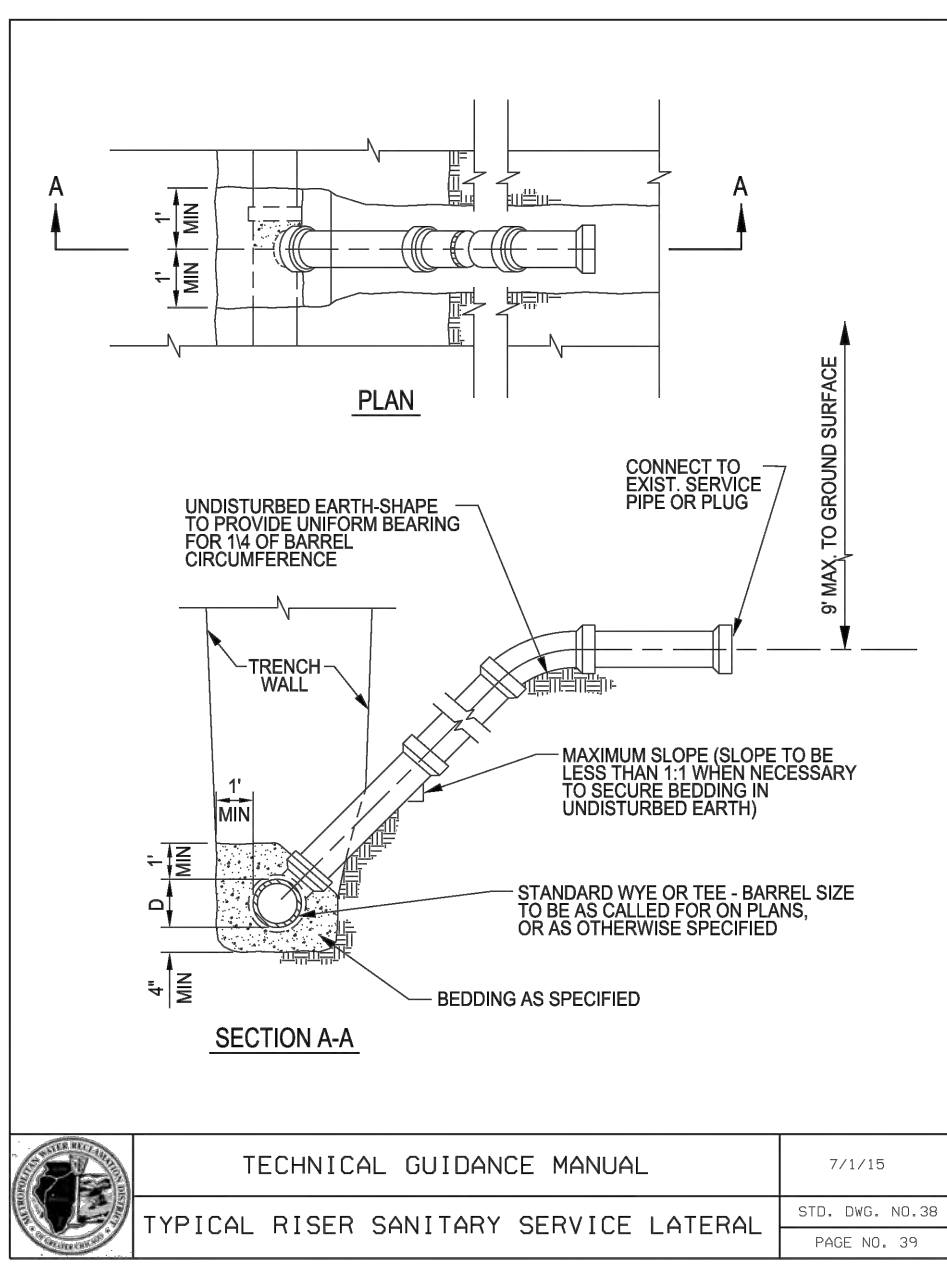
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BRIDGES TOP TRACER
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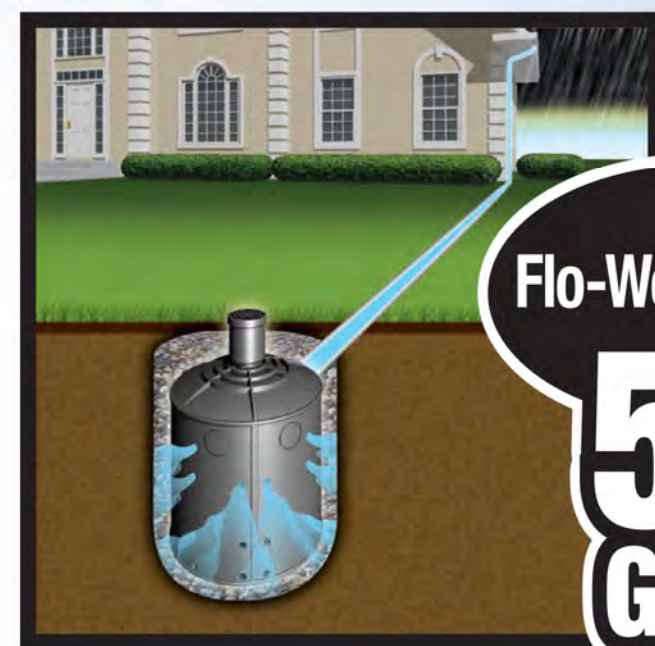
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SITE GRADING PLAN

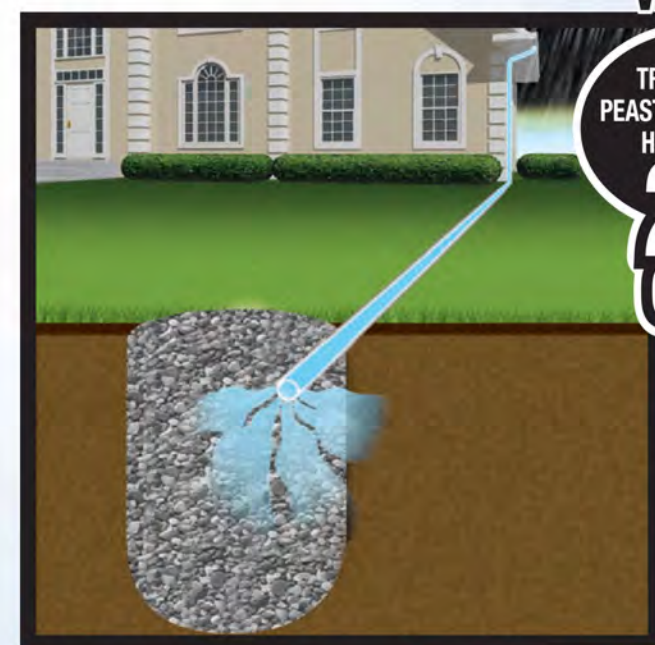




Flo-Well Manufactured Dry Well



**Flo-Well HOLDS
50
GAL**



**TRADITIONAL
PEASTONE DRYWELL
HOLDS ONLY
20
GAL**

LEED credits:
Make your
site green
Retains storm
water on-site
Less costly to
install than pipe
or concrete
Expands to
manage large
volumes of water



NDS
WE PUT WATER IN ITS PLACE

Flo-Well Manufactured Dry Well

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
FWAS24	24" diam. x 28.75" H Flo-Well® Storm water-leaching system. Includes 3 side panels, 1 Top Component. Fits 4" SCH-40 Pipe and 4" DWV Pipe	Black	1	25.15	10FW	NDS #FWAS24 structural foam polyolefin round drywell system with UV inhibitors. 24" dia., 28.75" high, 48 gal. with 18-1.5" knockout leaching ports and 3-4.5" knockout inlet/outlet ports per panel.
FWAS24C	24" diam. Flo-Well® Cover. Use with #FWAS24	Black	2	8.00	10FW	NDS#FWAS24C structural foam polyolefin round drywell system cover with UV inhibitors. 24 1/4" dia., 4.58" height, 34" outer lip, 4.5" center knockout fits NDS #FWAS24, NDS #FWSPS3.
FWSPS3	Flo-Well® Side Panels/Extension Only. Includes 3 side panels; makes 1 round drywell. Fits #FWAS24 (May also be used as a durable compost bin.)	Black	1	5.00	10FW	NDS #FWSPS3 structural foam polyolefin side panels with UV inhibitors with 18-1 1/2" knockout leaching ports and 3-4.5" knockout inlet/outlet ports per panel. 24" high with recessed .75" lip for firm stacking.
FWBP24	24" diam. Flo-Well® Bottom. Fits #FWAS24	Black	5	3.50	10FW	NDS #FWBP24 structural foam polyolefin round Flo-Well® bottom with UV inhibitors. 24" diameter with six 1 1/2" leaching ports. 4.5" center knockout for strut coupling.
FWSD69	4" SCH40 Surface Drain Inlet with Grate. Fits #FWAS24 and #FWAS24C ADA Compliant	Black	8	1.85	10FW	NDS #FWSD69 structural foam polyolefin 6" grate with 4" inlet with UV inhibitors. 6" Diameter at inlet. 8" high, 4.5" OD fits Sch. 40 PVC fittings.
FWFF67	Porous Filter Fabric Wrap for Flo-Well®. Use with #FWAS24	Black	20	0.35	10FW	7' long x 2' wide to surround Flo-Well® Drywell System. Non-woven fabric. Weight 1 oz. Mullen burst 175 psi. 200 GPM flow through.

NDS
WE PUT WATER IN ITS PLACE

TOLL FREE 800-726-1994
851 N. Harvard Ave. Lindsay, CA 93247
www.NDSPRO.com

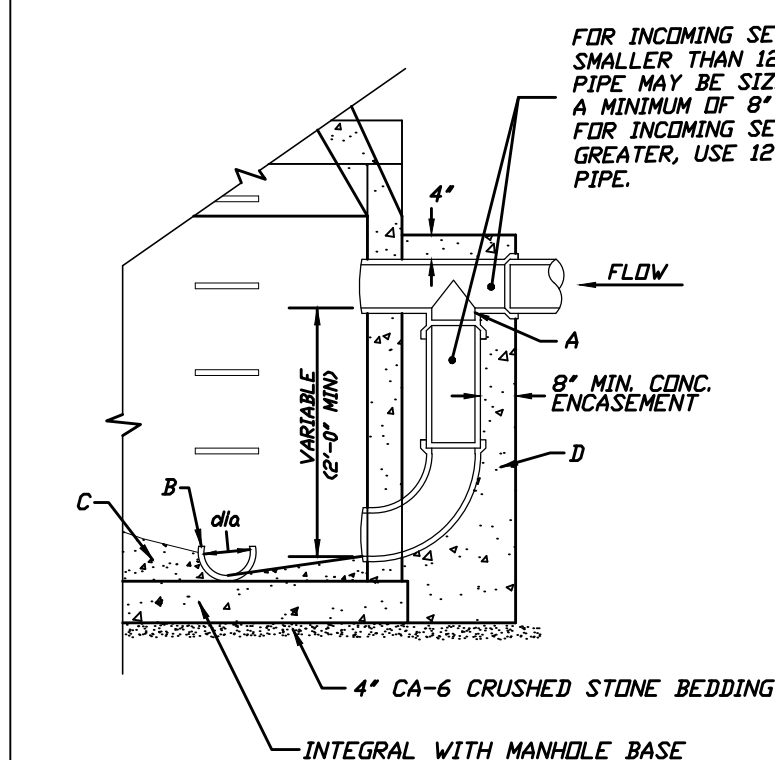


PROFILE CHANNEL DRAINS

Spee-D® Channel Drains

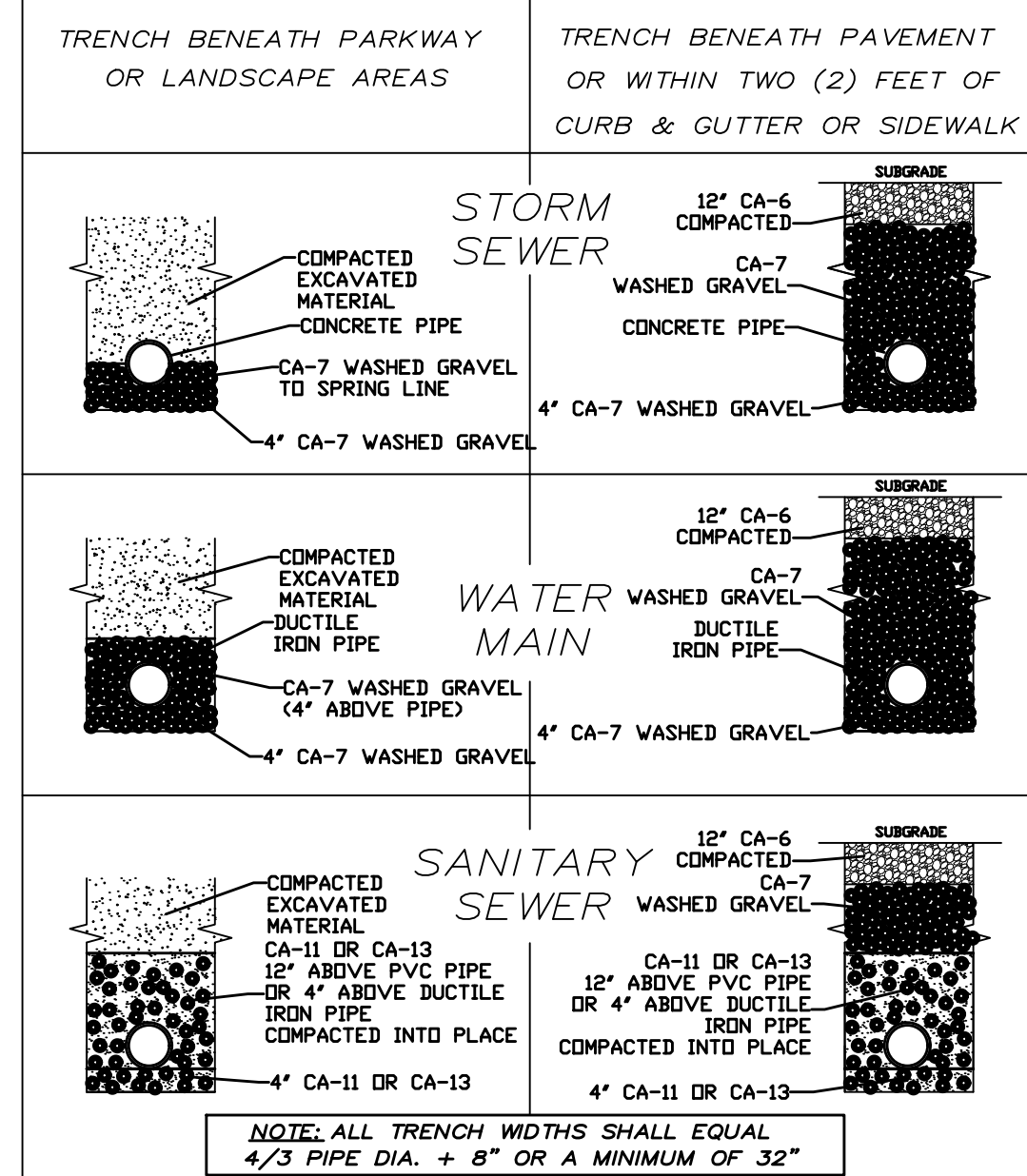
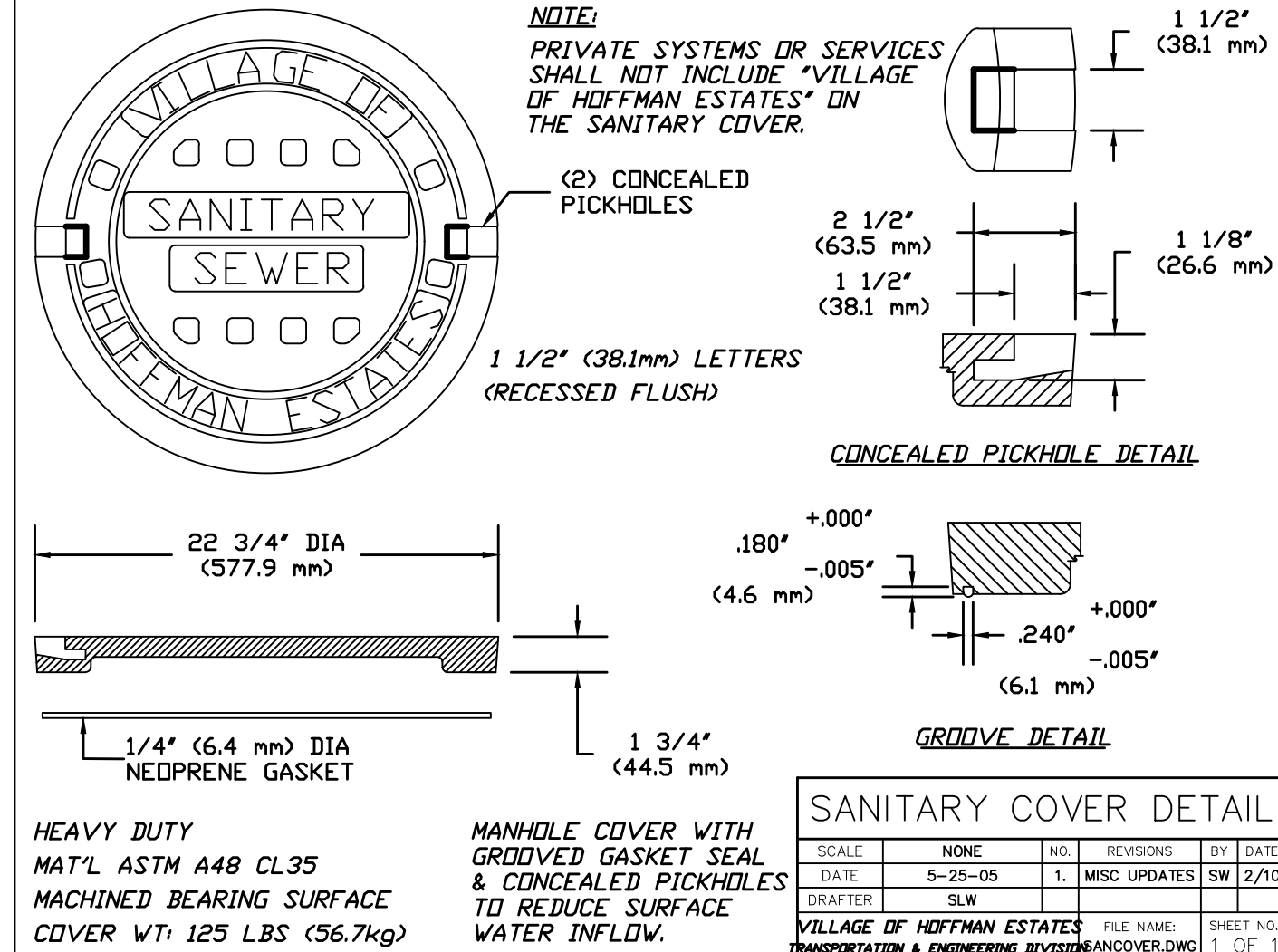
Ideal for commercial as well as residential applications. Effective in everything from patios to light vehicular traffic areas.

Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
229	Stainless Steel Screws, FH #8 x 1" for Spee-D Channel Decorative Plastic Grates	Steel	48	0.06	25PF	
240	2" Channel Slotted Grate	White	24 ft.	1.33	25PF	2 ft. Structural Foam Polyolefin Secured Channel Grate with UV inhibitor. Open surface area 16.78 square inches per foot. 51.27 GPM per foot.
241	2" Channel Slotted Grate	Gray	24 ft.	1.33	25PF	
242	2" Channel Slotted Grate	Green	24 ft.	1.33	25PF	
243	2" Channel Slotted Grate	Black	24 ft.	1.33	25PF	2 ft. Galvanized Steel Channel Grate. Open surface area 15.48 square inches per foot. 47.39 GPM per foot.
244	2" Channel Slotted Grate	Sand	24 ft.	1.33	25PF	
251	2" Channel Slotted Grate	Brick Red	24 ft.	1.42	25PF	
254	2" Galvanized Steel Channel Grate	Galvanized Steel	24 ft.	1.00	25PF	
See page 79, ADA Compliant.						
Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
829	Stainless Steel Screws, FH #8 x 1-1/4" for Spee-D Channel Decorative Plastic Grates	Steel	40	0.15	25PF	
252S	2" Channel Botanical Grate	Sand	24 ft.	1.74	25PF	2 ft. Structural Foam Polyolefin decorative botanical Channel Grate with UV inhibitor. Open surface area 7.78 square inches per foot. 23.80 GPM per foot.
252GR	2" Channel Botanical Grate	Green	24 ft.	1.74	25PF	
252GY	2" Channel Botanical Grate	Gray	24 ft.	1.74	25PF	
252	2" Channel Botanical Grate	Black	24 ft.	1.74	25PF	2 ft. Cast iron decorative botanical Channel Grate. Open surface area 5.89 square inches per foot. 27.58 GPM per foot. Class B load rated.
252C	2" Cast iron Channel Botanical Grate	Black*	2 ft.	7.06	25PF	
229	Stainless Steel Screws, FH #8 x 1" for Spee-D Channel Decorative Iron Grates	Steel	48	0.06	25PF	
See page 79, ADA Compliant.						
Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
829	Stainless Steel Screws, FH #8 x 1-1/4" for Spee-D Channel Decorative Plastic Grates	Steel	40	0.15	25PF	
253S	2" Channel Wave Grate	Sand	24 ft.	1.84	25PF	2 ft. Structural Foam Polyolefin decorative wave Channel Grate with UV inhibitor. Open surface area 7.78 square inches per foot. 23.80 GPM per foot.
253GR	2" Channel Wave Grate	Green	24 ft.	1.84	25PF	
253GY	2" Channel Wave Grate	Gray	24 ft.	1.84	25PF	
253	2" Channel Wave Grate	Black	24 ft.	1.84	25PF	2 ft. Cast iron decorative wave Channel Grate. Open surface area 7.41 square inches per foot. 22.67 GPM per foot. Class B load rated.
253C	2" Cast iron Channel Wave Grate	Black*	2 ft.	7.52	25PF	
229	Stainless Steel Screws, FH #8 x 1" for Spee-D Channel Decorative Iron Grates	Steel	48	0.06	25PF	
See page 79, ADA Compliant.						
Part No.	Description	Color	Pkg. Qty.	Wt. Ea. (lbs.)	Product Class	Specifications
400	4" Spee-D Channel Drain	Gray	24 ft.	4.83	25PF	PVC Channel Drain with Inverse Flying Buttress design, bottom flanges, perforated horizontal, reinforced walls and UV inhibitor.
400-10	10" Spee-D Channel Drain	Gray	60 ft.	11.00	25PF	
400-10WH	10" Spee-D Channel Drain Assembly with pre-fastened Gray Plastic Grates	Gray	60 ft.	17.5	25PF	
400-10MTL	10" Spee-D Channel Drain Assembly with pre-fastened Galvanized Steel Grates	Galvanized Steel	40 ft.	20.5	25PF	
Grate should be recessed 1/4" below finish grade in non-traffic applications. Grate should be recessed 1/4" below finished grade in traffic applications.						



NOTES: 1. ALL JOINTS SHALL CONFORM TO ASTM C-425 SPECIFICATIONS EXCEPT FOR #2 BELOW.
2. MORTAR OR BITUMINOUS MASTIC JOINT ALLOWED ONLY AS SHOWN.
3. ALL DROP PIPES MUST BE DUCTILE IRON PIPE.

SCALE	NONE	NO.	REVISIONS	BY	DATE
DATE	5-25-05	1	MISC UPDATES	SW	2/10
DRAWN	SLW				
FILE NAME	VILLAGE OF HOFFMAN ESTATES				
SHEET NO.	1	OF	1		



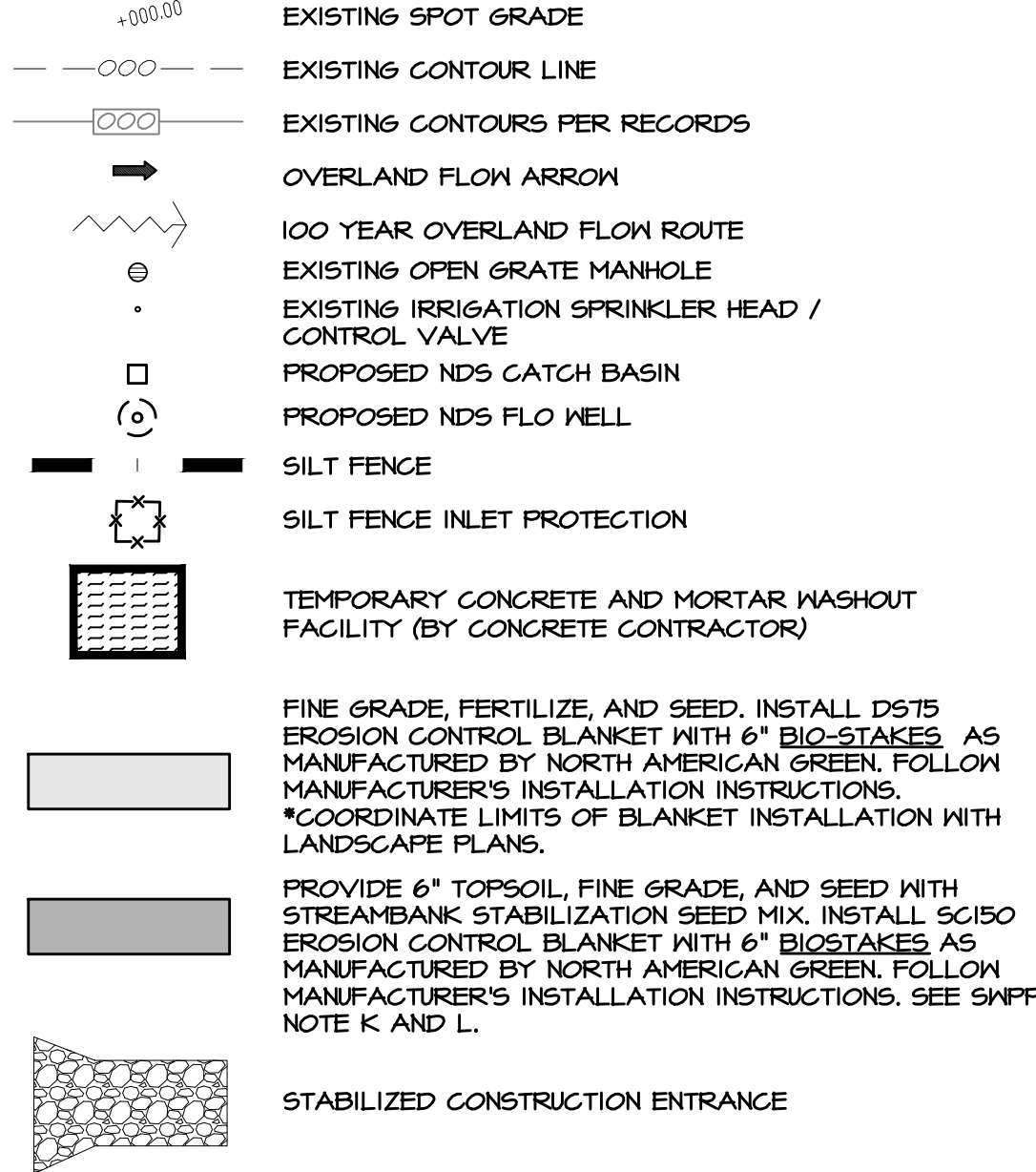
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SHEET NO.	1	OF	1						

NOTE: INSTALLATION OF SILT FENCING, EROSION CONTROL BLANKET, SEEDING, CONSTRUCTION ENTRANCE, AND STORM STRUCTURE INLET PROTECTION WILL BE BY PARK DISTRICT.

STREAMBANK STABILIZATION SEED MIX

Species	lb./acre
Alisma subcordatum Water Plantain	0.260
Andropogon gerardii Big Bluestem	5.000
Andropogon scoparius (Schizachyrium s.) Little Bluestem	5.000
Aster novae-angliae (Symphyotrichum n.) New England Aster	0.125
Bouteloua curtipendula Side Oats Gramma	5.000
Carex vulpinoidea Fox Sedge	0.600
Eloocharis spp Spike Rush	0.125
Elymus canadensis Canadian Wild Rye	8.000
Elymus villosus Silkey Wild Rye	4.000
Elymus virginicus Virginia Wild Rye	8.000
Glyceria striata Fowl Manna Grass	1.000
Helenium autumnale Sneezeweed	0.125
Juncus spp Rush Species	0.125
Leersia oryzoides Rice Cut Grass	1.000
Panicum virgatum Switch Grass	1.000
Scirpus validus (Schoenoplectus tabernaemontani) Great Bulrush	0.125
Sorghastrum nutans Indian Grass	10.000
Spartina pectinata Prairie Cord Grass	0.600
Agrostis alba Red Top Grass	1.000
Avena sativa Seed Oats	20
Lolium multiflorum Annual Rye	5.000
Total	75.875
Permanent matrix	49.875

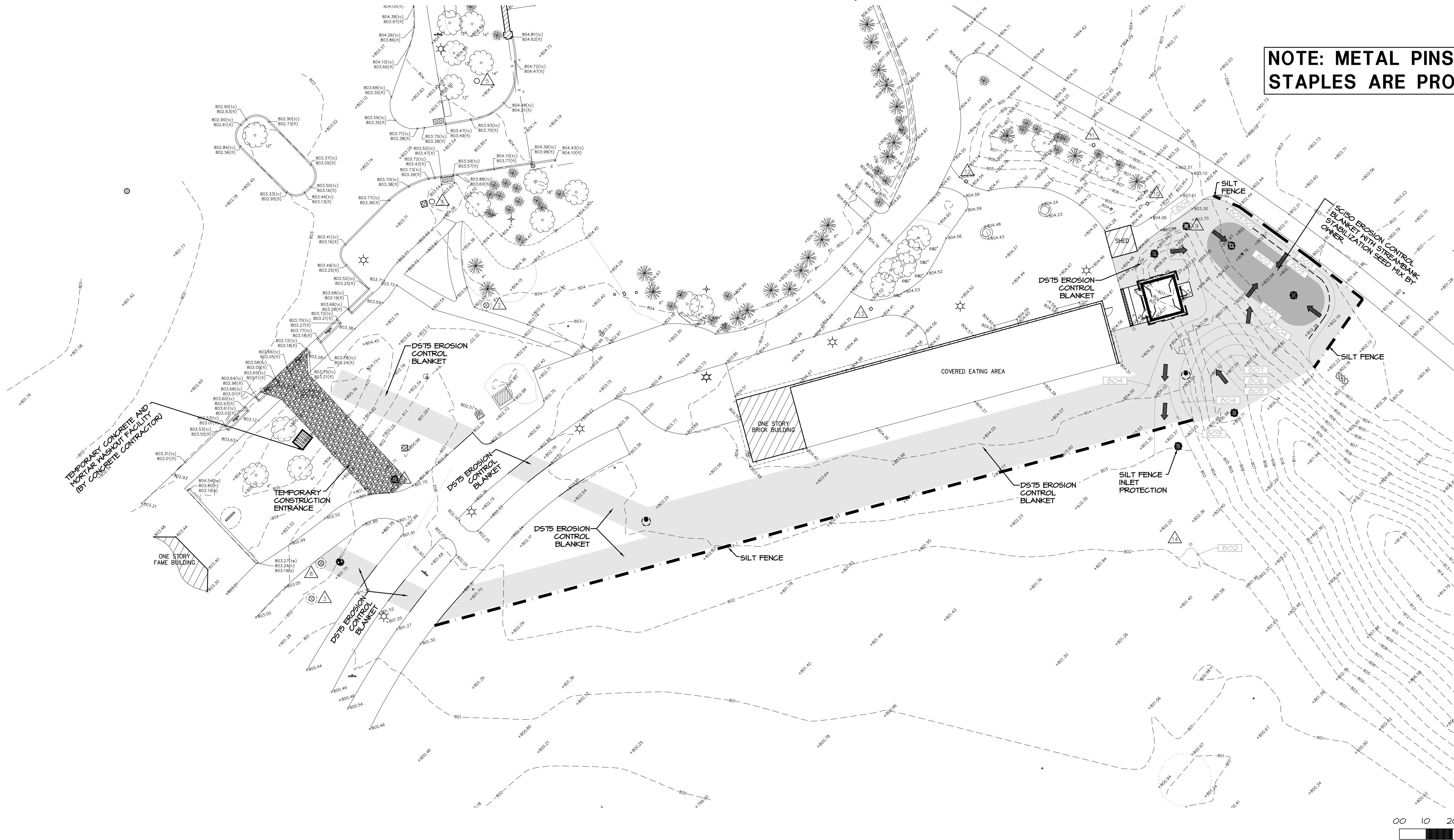
SWPPP LEGEND



SWPPP NOTES:

- ALL DISTURBED GREEN SPACES ON THE SITE SHALL BE RESTORED ACCORDING TO THE SEED BED PREPARATION SPECIFICATIONS BELOW AND BLANKETED OR MATTED AS SHOWN ON THE PLANS.
- TEMPORARY OR PERMANENT STABILIZATION SHALL OCCUR IMMEDIATELY WHENEVER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL CONSIST OF THE INSTALLATION OF TEMPORARY SEEDING.
- CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION ENTRANCES AS NECESSARY TO EXCAVATE AREAS AND HAIL SOILS ON-SITE. TRACKING OF DEBRIS ON SITE WILL NOT BE TOLERATED. ANY DEBRIS LEFT OUTSIDE OF THE PROJECT LIMITS MUST BE CLEANED IMMEDIATELY.
- EROSION CONTROL BLANKETS AND TURF REINFORCEMENT MATS SHALL BE INSTALLED USING 6" BIO-STAKES AS MANUFACTURED BY NORTH AMERICAN GREEN. METAL STAPLES AND STAPLES ARE PROHIBITED.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY MAINTENANCE FOR THE SEDIMENT AND EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS, INSPECTION REPORTS, CORRECTIVE ACTION FORMS, SWPPP AMENDMENT LOGS, SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS, GRADING AND STABILIZATION ACTIVITIES LOGS, SWPPP TRAINING LOGS, AND DELEGATION OF AUTHORITY FORMS FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL PROVIDE COPIES OF ALL SWPPP REPORTS, FORMS, AND LOGS TO THE WT GROUP ONCE THE SITE HAS BEEN STABILIZED. THE CONTRACTOR SHALL MAINTAIN THESE DOCUMENTS FOR A PERIOD OF 3 YEARS FROM THE FINAL STABILIZATION OF THE SITE.
- FOLLOWING THE REMOVAL OF THE SILT FENCE, THE CONTRACTOR SHALL RESTORE THE SILT FENCE TRENCH WITH SOD.
- CONTRACTOR SHALL INITIATE STABILIZATION OF ALL DISTURBED AREAS WITHIN ONE CALENDAR DAY.
- SEED BED PREPARATION:
 - J.A. ALL STONES, ROCKS, DEBRIS LARGER THAN 1" IN DIAMETER SHALL BE REMOVED.
 - J.B. DISK OR TILL TOPSOIL TO A DEPTH OF 3" AND REDUCE ALL SOIL PARTICLES TO NO LARGER THAN 2".
 - J.C. THE SURFACE SHALL BE FREE OF WEEDS, STONES, ROCKS, STICKS, GULLIES, CLODS, AND DEBRIS.
 - J.D. THE AREA SHALL BE FINE GRADED.
 - J.E. THE SEED SHALL BE PLACED INTO THE SOIL WITH A MACHINE THAT MECHANICALLY PLACES THE SEED IN DIRECT CONTACT WITH THE SOIL, AND COVERS THE SEED WITH THE SOIL.
 - J.F. BROADCAST AND HYDROSEED WILL NOT BE ALLOWED.
 - J.G. SEEDED AREAS SHALL BE COVERED WITH THE EROSION BLANKET RIGHT AFTER THE SEED HAS BEEN SOWN.
 - J.H. ANY SOIL AMENDMENTS NEEDED TO ACHIEVE A 90% HEALTHY STAND OF VEGETATION WILL BE ADDED TO THE SOIL AT NO EXTRA CHARGE TO THE OWNER. THE STAND OF VEGETATION WILL NEED TO BE ACCEPTED BY THE ENGINEER.
 - J.I. THE SEED MIX SHALL BE KENTUCKY BLUEGRASS 100LBS/ACRE, REVERSE PERENNIAL RYEGRASS 60 LBS/ACRE, ANNUAL RYE 40 LBS/ACRE AND CREEPING RED FESCUE 40 LBS/ACRE TOTAL.
- CONTRACTOR TO INSTALL TEMPORARY SEEDING AND EROSION CONTROL BLANKETS AS NECESSARY TO STABILIZE DISTURBED AREAS AND SOIL STOCKPILES. OWNER TO INSTALL FINAL SEEDING, BLANKETS AND LANDSCAPING WITHIN THREE DAYS OF FINAL DISTURBANCE.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 6" TOPSOIL IN DISTURBED AND PROPOSED LAWN / LANDSCAPE AREAS. SEE SWPPP NOTE "J" FOR TOPSOIL PREPARATION.

NOTE: METAL PINS AND STAPLES ARE PROHIBITED



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AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

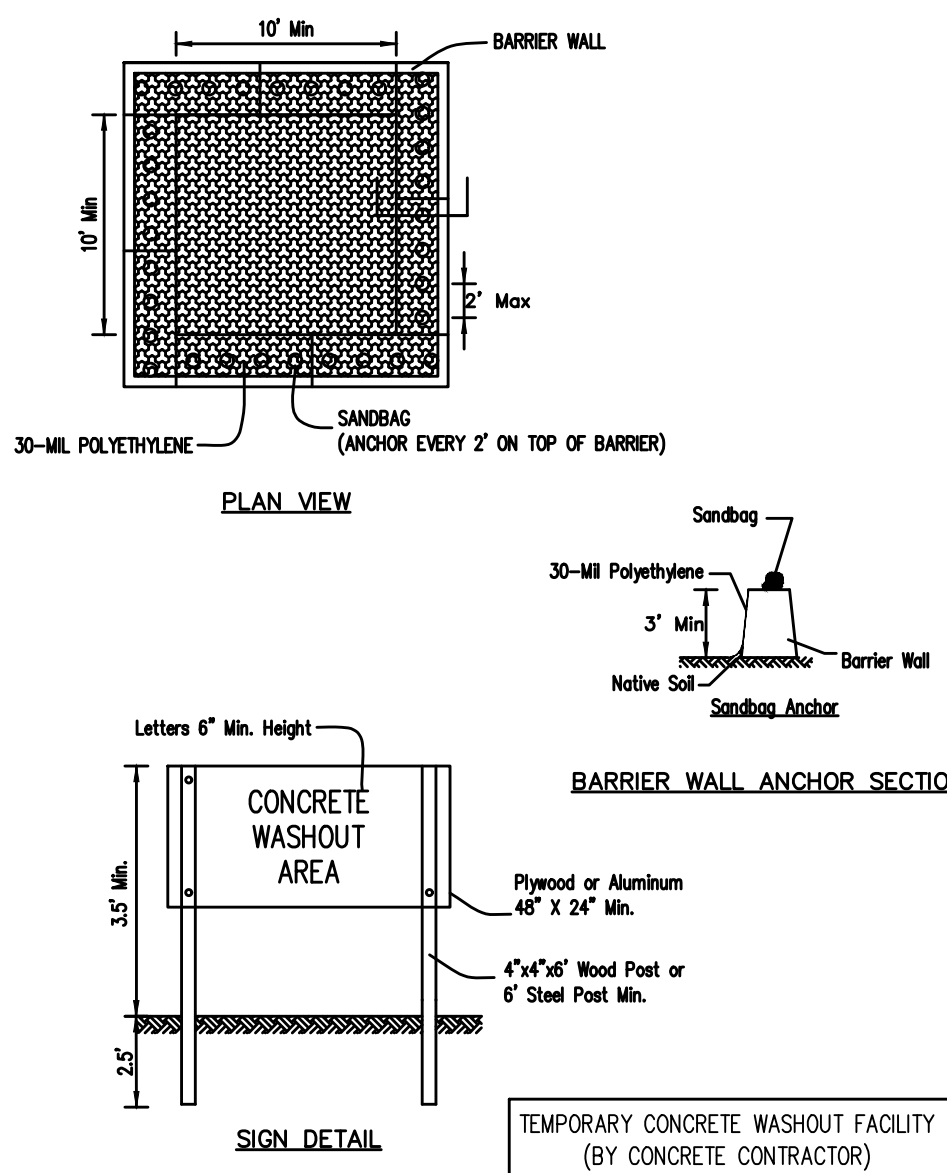
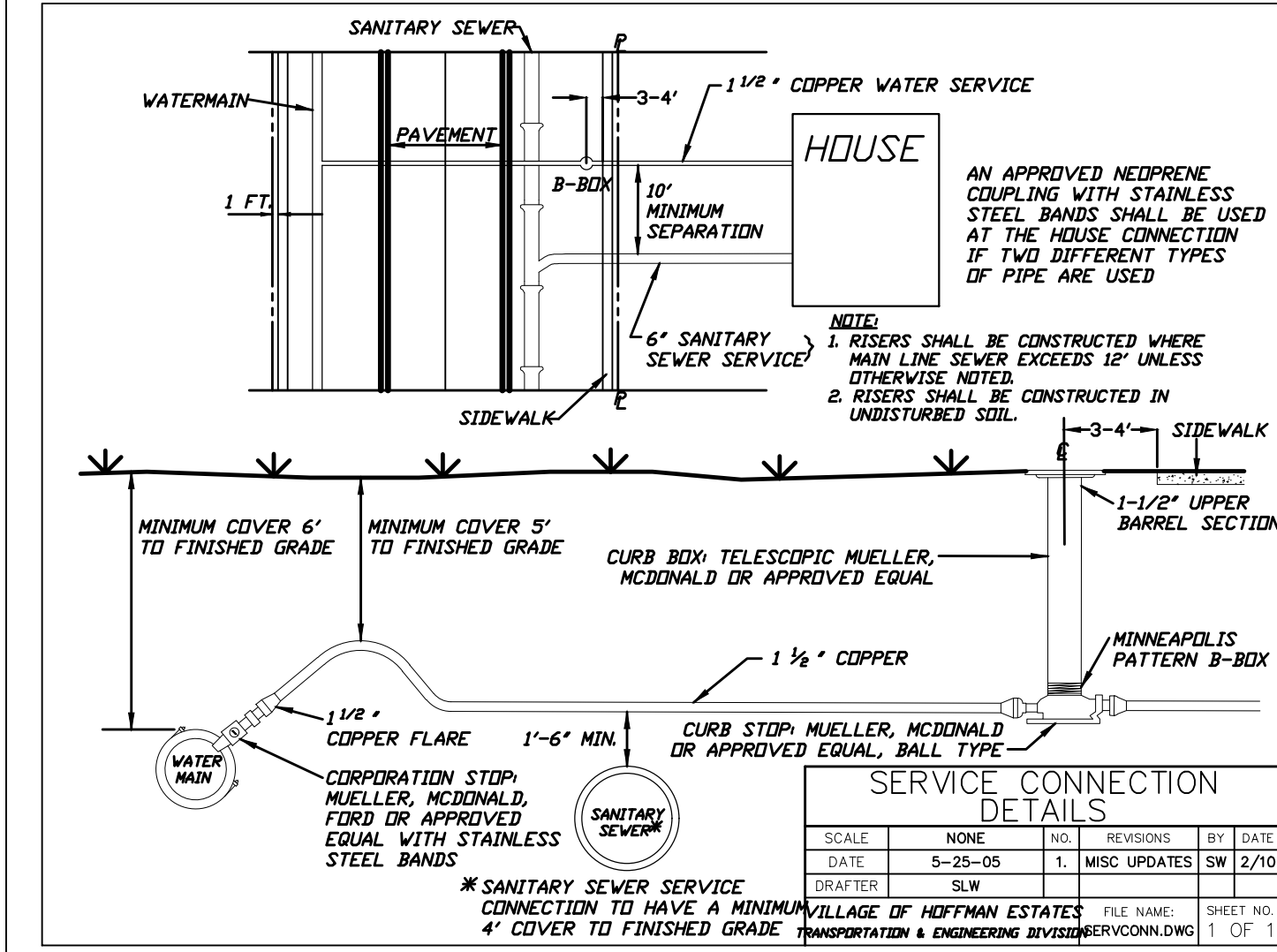
BRIDGES TOP TRACER
BATHROOM UTILITIES
1400 POPLAR CREEK DRIVE
HOFFMAN ESTATES, IL 60169
BRIDGES OF POPLAR CREEK

ISSUE

TO	DATE
ISSUED FOR BID	3-1-22

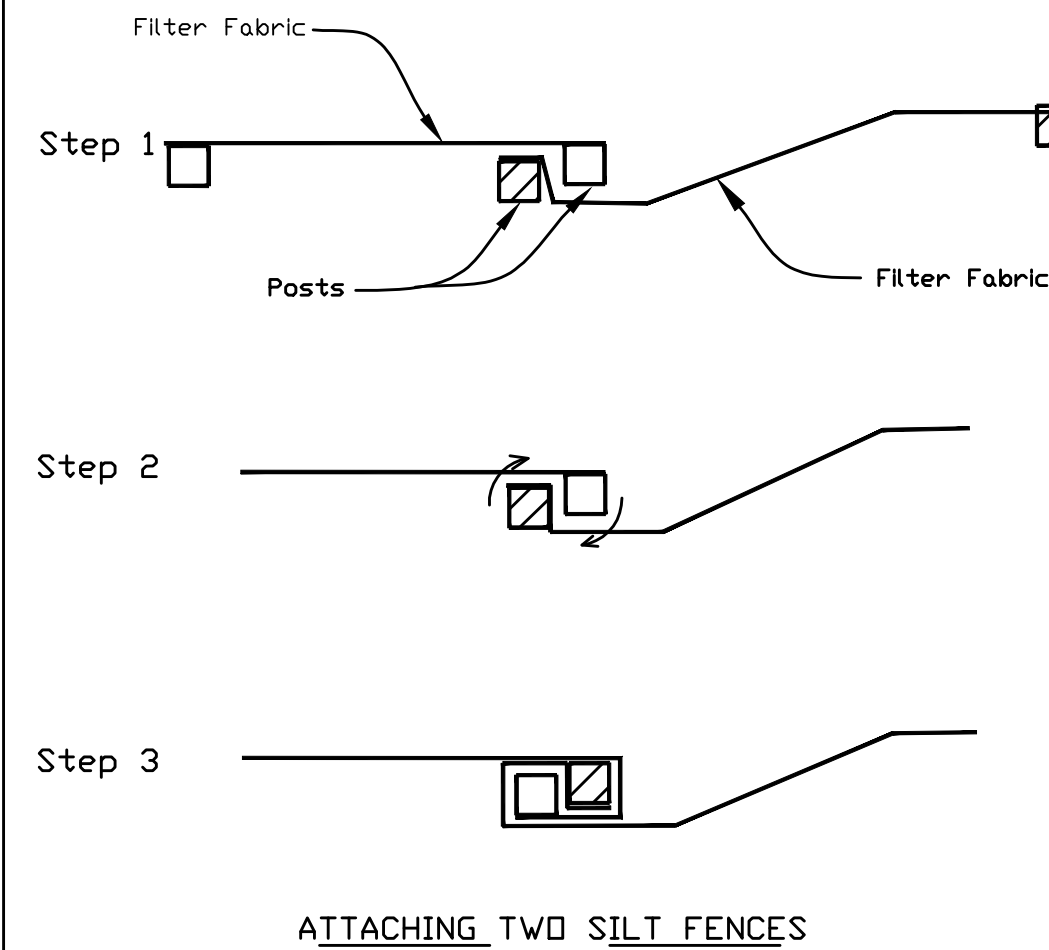
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C-4.0
STORMWATER
POLLUTION PREVENTION
PLAN



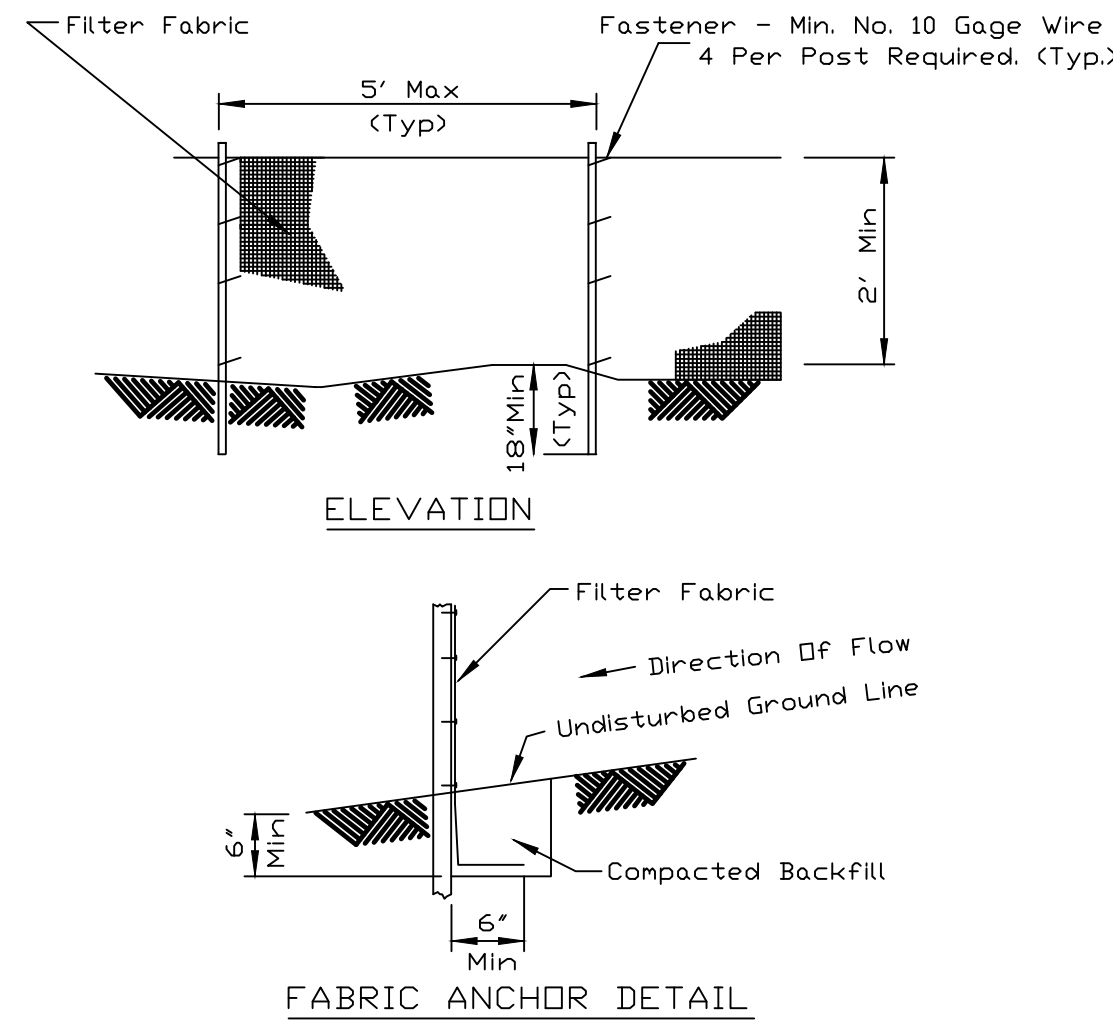
- NOTES:**
- Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facility to a functional condition.
 - Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL



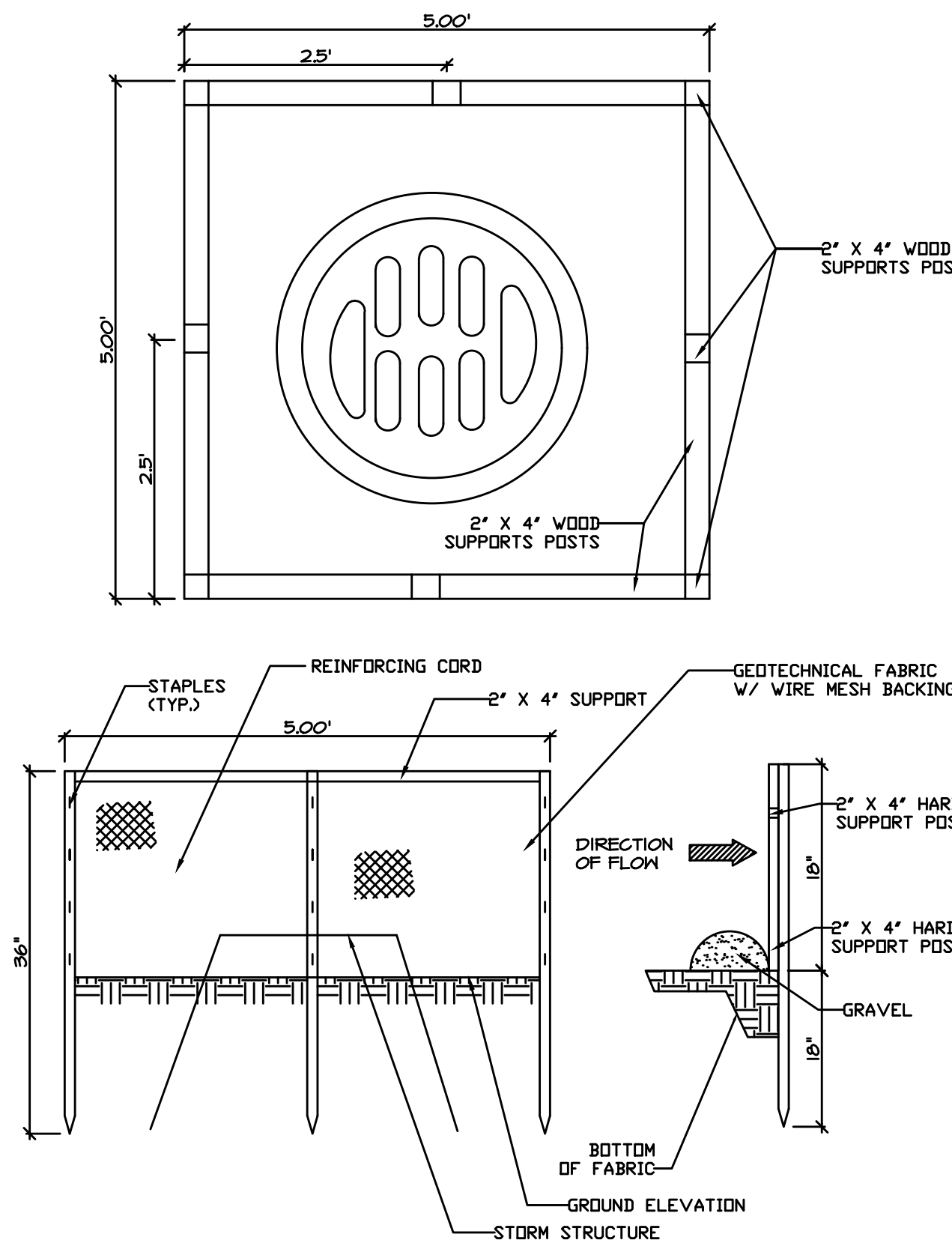
- Place the end post of the second fence inside the end post of the first fence.
- Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
- Cut the fabric near the bottom of the stakes to accommodate the 6" flap.
- Drive both posts a minimum of 18 inches into the ground and bury the flap.
- Compact backfill (particularly at splices) completely to prevent stormwater piping.

STANDARD DWG. NO. IUM-620B(KW)
SHEET 1 OF 1
DATE 2-06-2012



- NOTES:**
- Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
 - Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
 - Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

STANDARD DWG. NO. IUM-620A
SHEET 1 OF 2
DATE 3-16-12



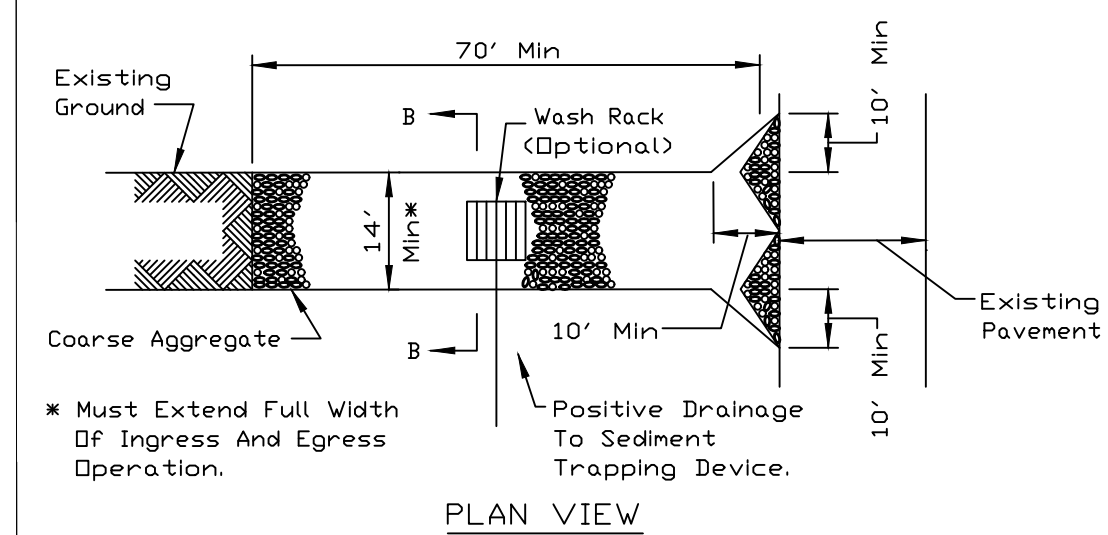
GENERAL NOTES FOR CONSTRUCTION

- SET 2" X 4" POSTS
- TO MAINTAIN STABILITY OF THE INSTALLATION MAKE A 2" X 4" FRAME AROUND THE STAKES, AT THE TOP F THE STAKES.
- STAPLE THE WIRE MESH FENCING TO EACH POST. (MAX OPENINGS IN MESH 6")
- ATTACH THE FILTER FABRIC TO THE WIRE MESH FENCING AND EXTEND IT INTO THE TRENCH.
- FOR PARKING LOT & PAVED APPLICATION IN GROUND STAKES SHOULD BE CUT OFF AND A SELF SUPPORTING "X" FRAME SUBSTITUTED.

SILT FENCE INLET PROTECTION

NOT TO SCALE

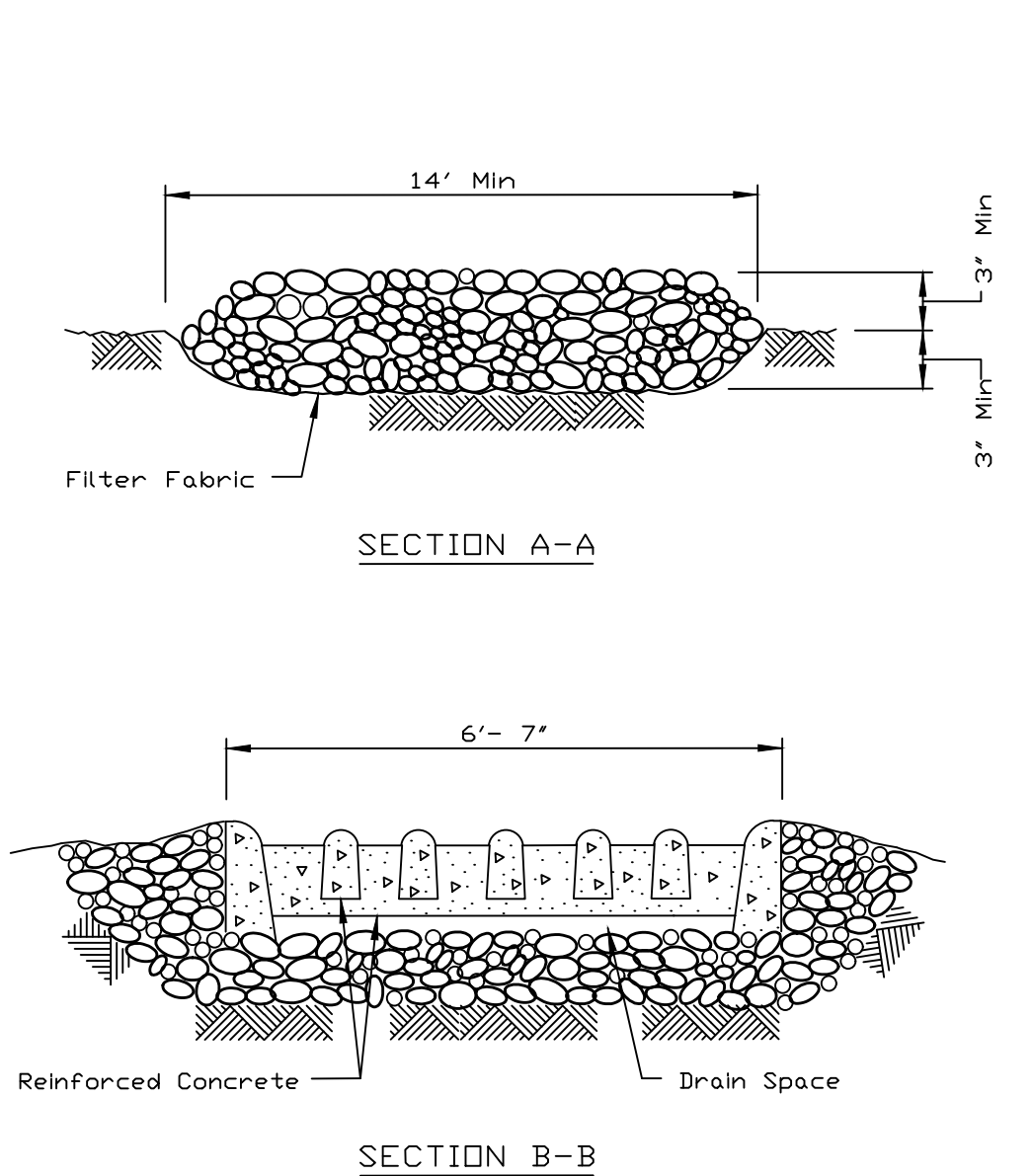
STABILIZED CONSTRUCTION ENTRANCE PLAN



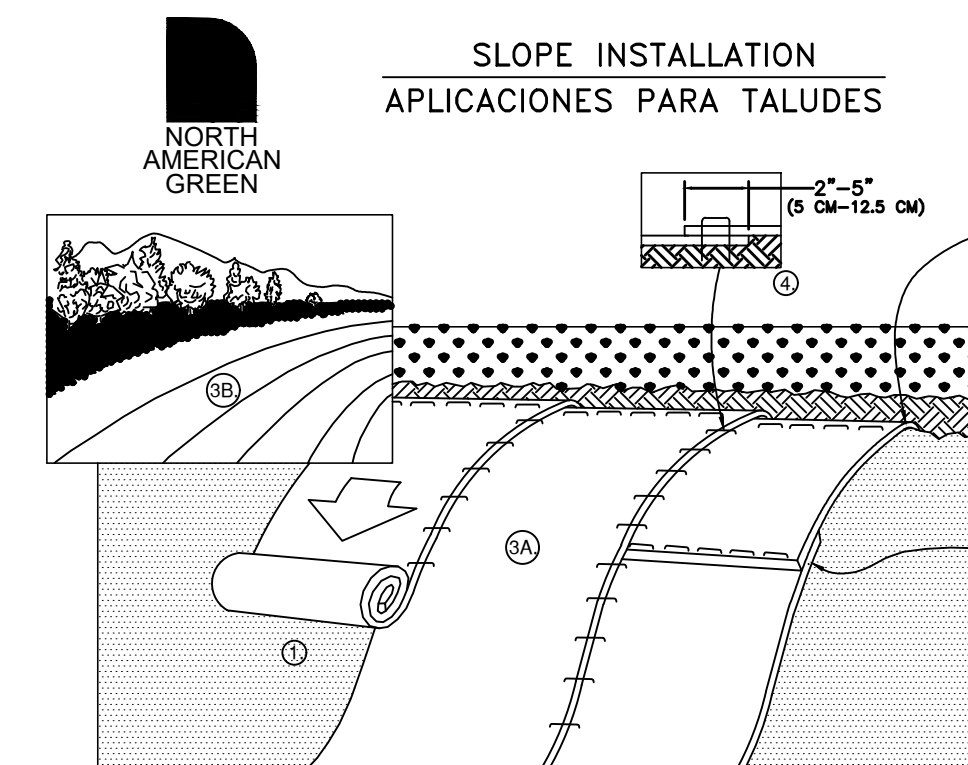
- NOTES:**
- Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
 - Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
 - Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
 - If wash racks are used they shall be installed according to the manufacturers specifications.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ILLINOIS

STABILIZED CONSTRUCTION ENTRANCE PLAN



U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ILLINOIS



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
 - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
 - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM - STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
 - CONSECUTIVE BLANKETS SPUN DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.
- NOTE:** MIN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- ALL BLANKETS SHALL BE INSTALLED WITH 6" BISTAKES.

ISSUE

TO DATE
ISSUED FOR BID 3-1-22

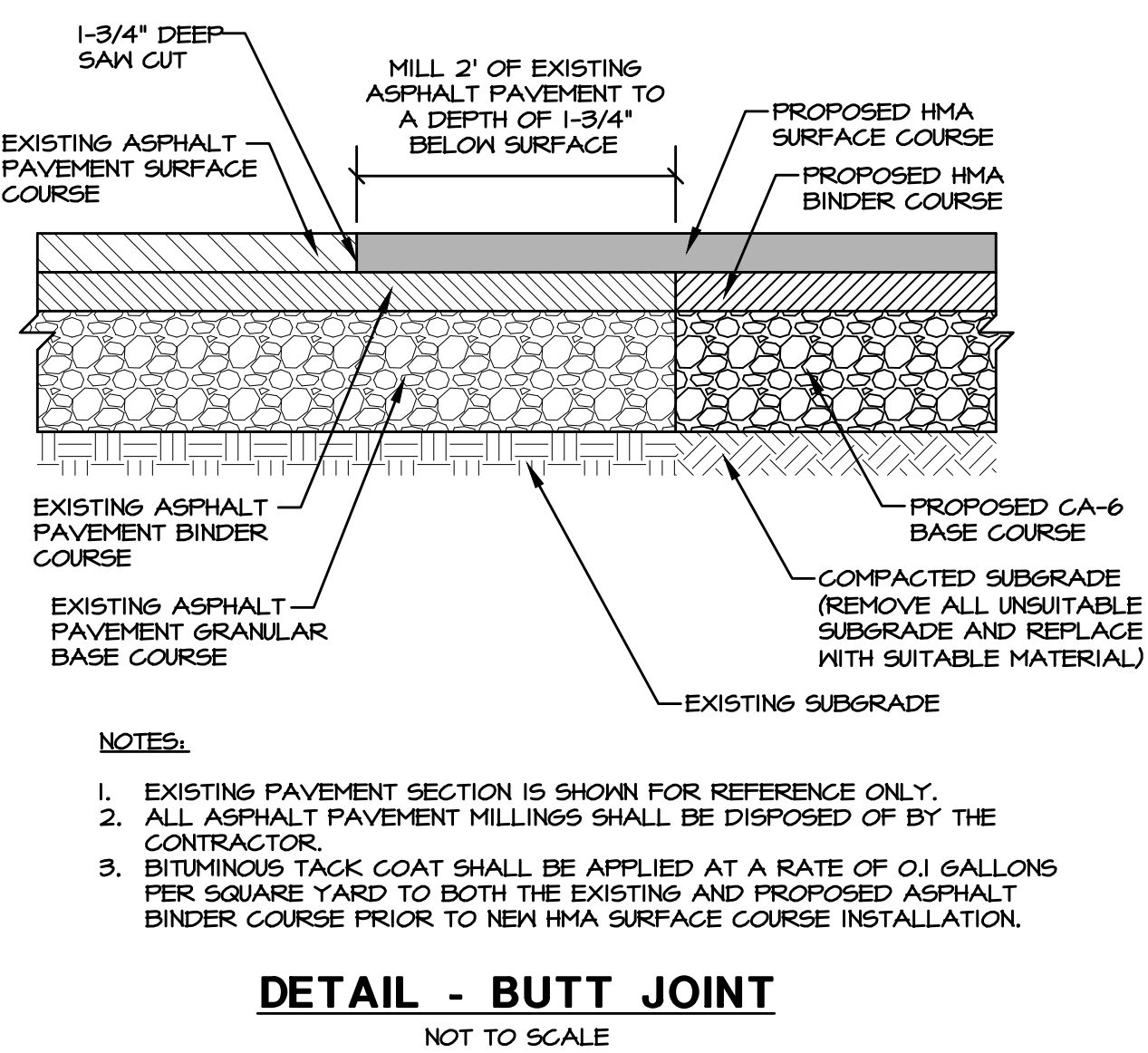
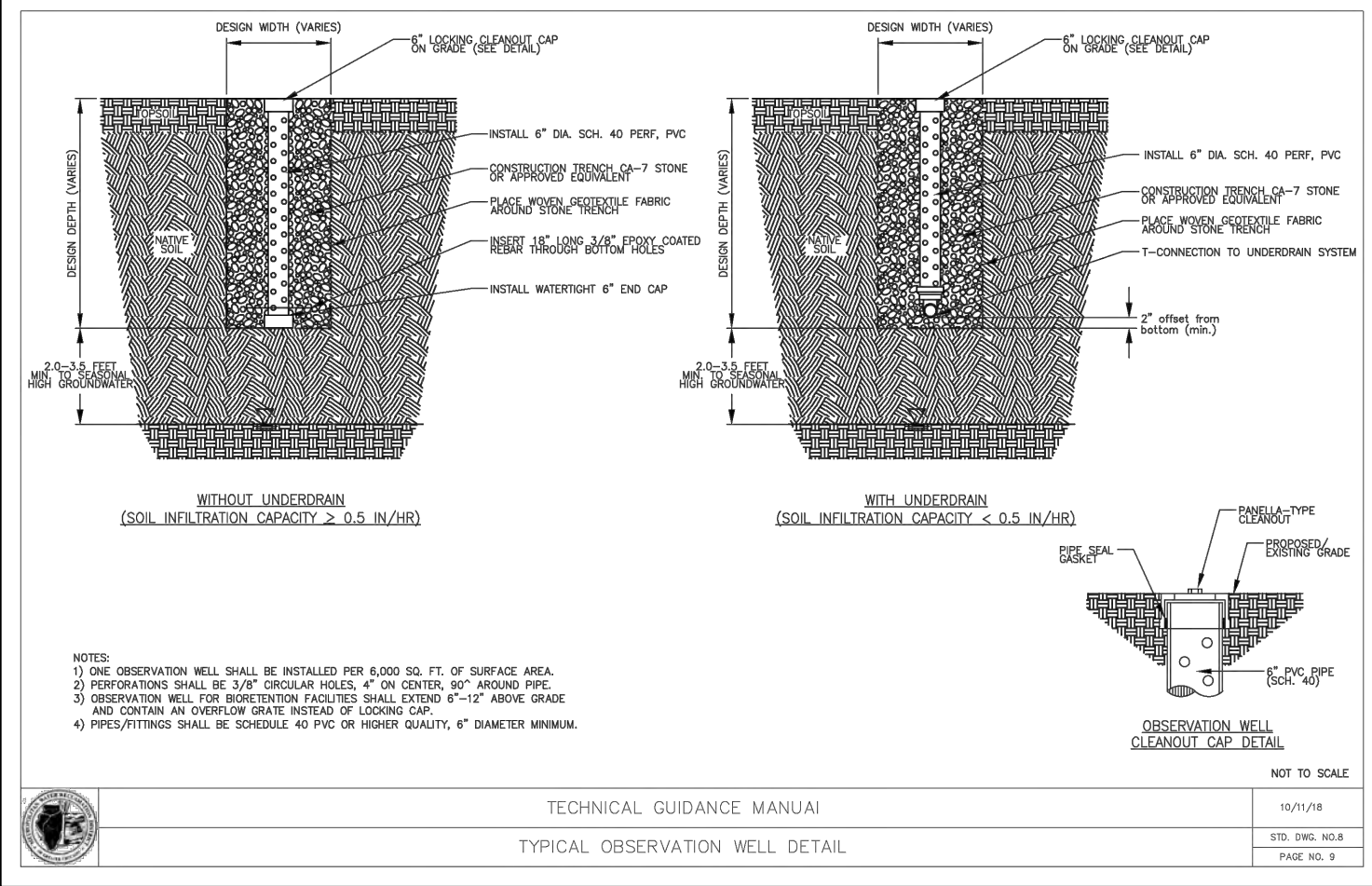
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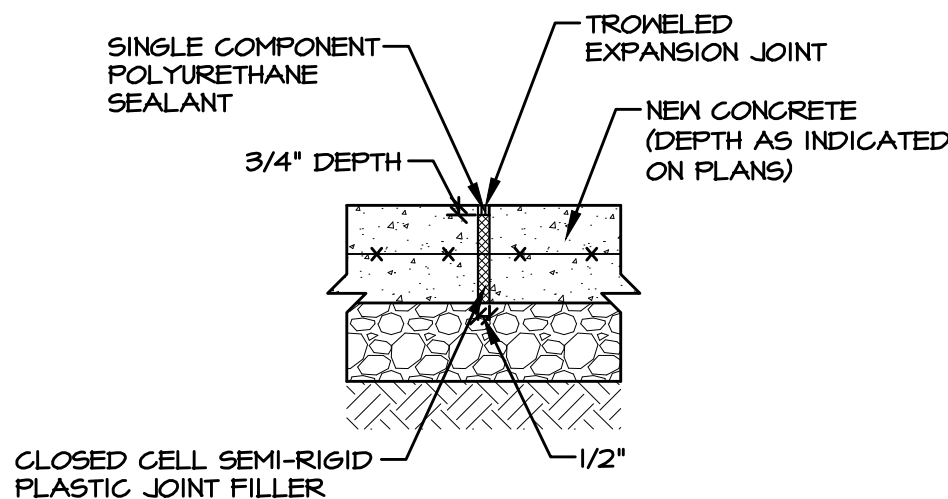
C-4.1

STORMWATER
POLLUTION PREVENTION
DETAILS



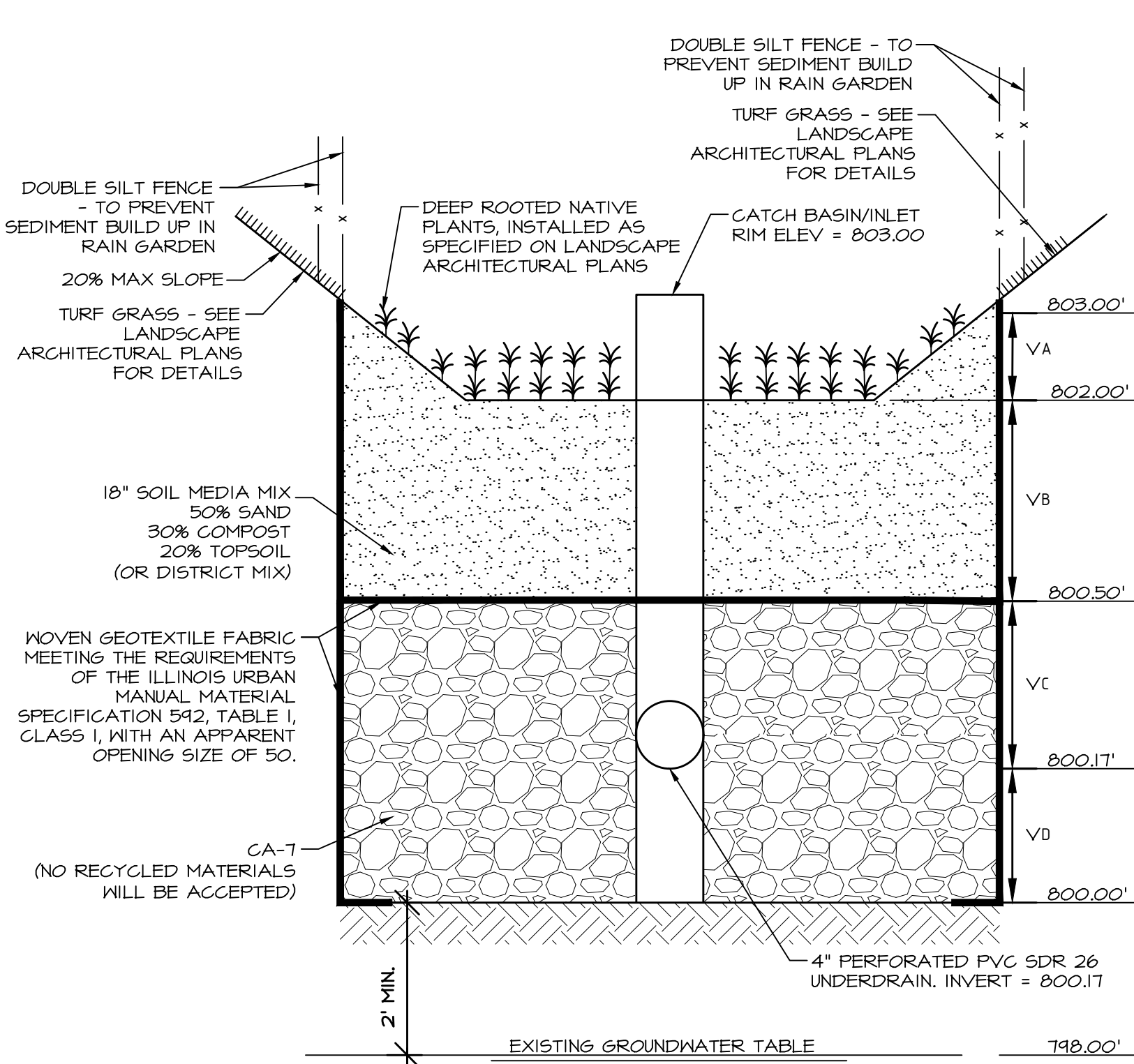
- NOTES:
1. EXISTING PAVEMENT SECTION IS SHOWN FOR REFERENCE ONLY.
 2. ALL ASPHALT PAVEMENT MILLINGS SHALL BE DISPOSED OF BY THE CONTRACTOR.
 3. BITUMINOUS TACK COAT SHALL BE APPLIED AT A RATE OF 0.1 GALLONS PER SQUARE YARD TO BOTH THE EXISTING AND PROPOSED ASPHALT BINDER COURSE PRIOR TO NEW HMA SURFACE COURSE INSTALLATION.

DETAIL - BUTT JOINT
NOT TO SCALE



- NOTES:
1. EXPANSION JOINTS TO BE INSTALLED AT EDGES OF ALL CASTINGS ADJACENT TO CONCRETE.

DETAIL - CONCRETE EXPANSION JOINT
NOT TO SCALE

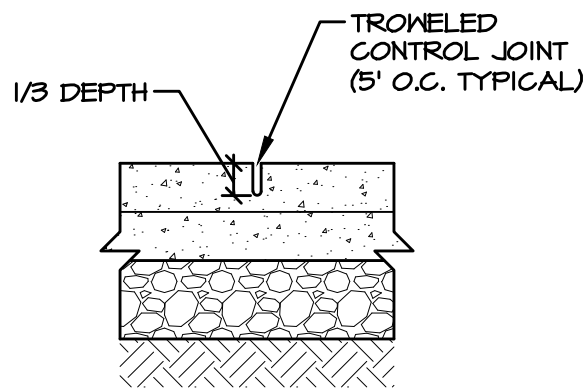


- NOTE:
1. PROTECT FROM SEDIMENTATION DURING CONSTRUCTION. IF SYSTEM BECOMES CONTAMINATED (INCLUDING BUT NOT LIMITED TO SEDIMENT) CONTRACTOR SHALL REPLACE THE SYSTEM AT HIS EXPENSE.

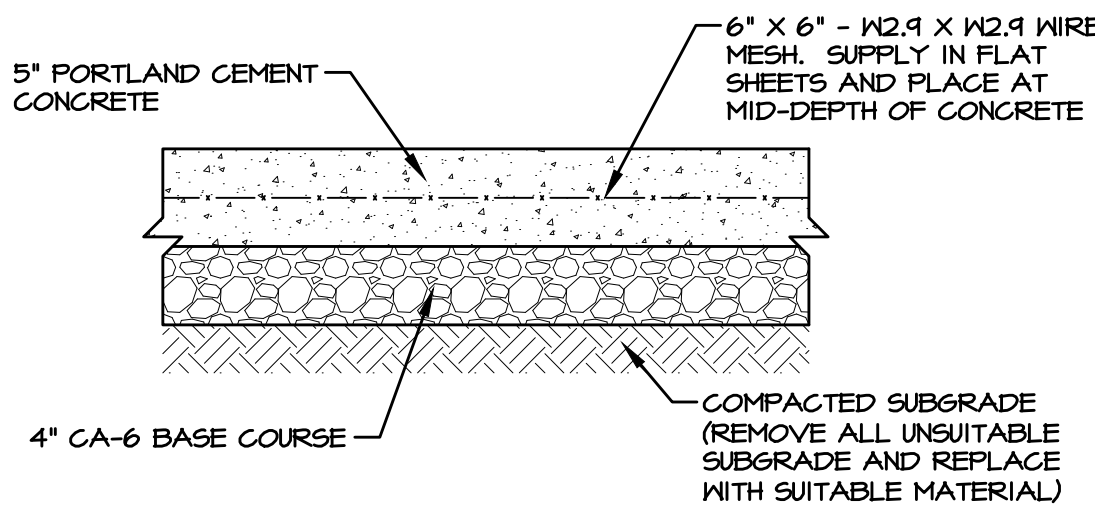
VOLUME TYPE	POROSITY	MEDIA VOLUME	STORAGE VOLUME	VOLUME PROVIDED
SURFACE STORAGE	1.00	VA = 584 C.F.	1.00 X VA	584 C.F.
SOIL MEDIA MIX	0.25	VB = 1,313 C.F.	0.5 X 0.25 X VB	164 C.F.
COARSE AGG. (ABOVE INVERT)	0.36	VC = 289 C.F.	0.5 X 0.36 X VC	52 C.F.
COARSE AGG. (BELOW INVERT)	0.36	VD = 146 C.F.	0.36 X VD	52 C.F.
		RAIN GARDEN TOTAL		852 C.F.

NOTE: GROUND WATER TABLE ENCOUNTERED DOWN TO 684.50' DURING GEOTECHNICAL INVESTIGATION.

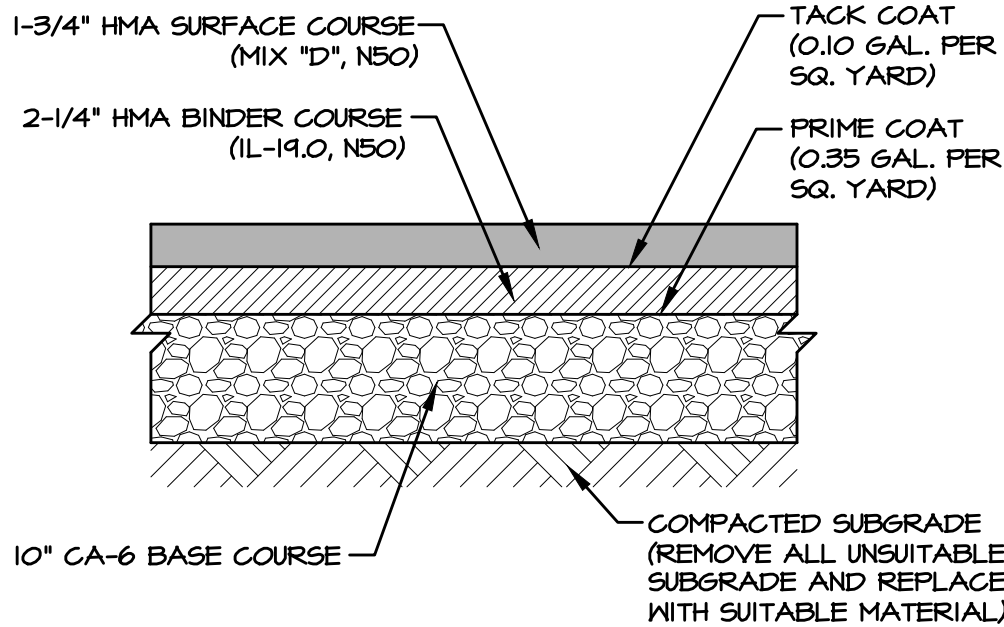
DETAIL - RAIN GARDEN
SCALE: N.T.S.



DETAIL - CONCRETE CONTROL JOINT
NOT TO SCALE



DETAIL - 5" CONCRETE SIDEWALK
NOT TO SCALE



DETAIL - ASPHALT PAVEMENT
NOT TO SCALE

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING:

1.1. ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.

1.2. "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" LATEST EDITION.

1.3. "ILLINOIS URBAN MANUAL," LATEST EDITION.

1.4. BUILDING CODES AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES.

1.5. UNITED STATES DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, 29 CFR PART 1926, "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."

1.6. ILLINOIS DRAINAGE LAW.

1.7. ILLINOIS ENVIRONMENTAL BARRIERS ACT.

1.8. ILLINOIS ACCESSIBILITY CODE.

1.9. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.

1.10. TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE.

2. ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNING AGENCY(S) SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE ALL NECESSARY REPAIRS AT HIS EXPENSE AND TO THE SATISFACTION OF THE GOVERNING AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNAGE AND TRAFFIC CONTROL DEVICES TO INFORM AND PROTECT THE PUBLIC.

3. CONTRACTOR SHALL NOTIFY THE LOCAL ENGINEERING OR PUBLIC WORKS DEPARTMENT AND/OR OTHER GOVERNING AUTHORITY(S) 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ON EACH MAJOR CATEGORY OF WORK, INCLUDING BUT NOT LIMITED TO, ANY PUBLIC IMPROVEMENTS, ROADWAY CLOSURES OR UTILITY INSTALLATIONS. 72 HOUR NOTICE SHALL BE GIVEN FOR ANY WORK ITEM THAT REQUIRES INSPECTION AND TESTING SUCH AS SANITARY SEWER OR WATER MAIN INSTALLATION.

4. BEING THAT THIS PROJECT IS PERMITTED UNDER THE NEW WATERSHED MANAGEMENT ORDINANCE (NMO), THE MWRD REQUIRES 48 HOURS OF ADVANCE NOTIFICATION PRIOR TO ANY GROUND DISTURBANCE. THE MWRD WILL BE INSPECTING FOR APPLICABLE EROSION CONTROL AND SEDIMENT CONTROL MEASURES SUCH AS SILT FENCING, SLOTTED INLET PROTECTION, CONCRETE MASH, ETC., FOLLOWED BY SANITARY SEWER AND VOLUME CONTROL INSTALLATION INSPECTIONS. PLEASE REFER TO THE APPROVED PERMIT/PLANS AND HAVE THESE MEASURES IN PLACE IN ACCORDANCE WITH THE SPECIFICATIONS.

5. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, ETC.) AND THE LOCAL MUNICIPALITY TO DETERMINE THE LOCATION OF UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ORDER TO AVOID POTENTIAL CONFLICTS. CONTRACTOR SHALL CALL THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIIE) AT 1-800-842-0123 OR BY DIALING 811. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER INDICATED ON THE PLANS OR NOT AND TO HAVE THESE UTILITIES STAKED PRIOR TO CONSTRUCTION.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE UTILITY OWNER.

7. ALL EASEMENTS FOR EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS PREPARED BY THE ENGINEER ACCORDING TO INFORMATION AVAILABLE FROM PUBLIC RECORDS OR VISIBLE FIELD MARKINGS. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND FOR THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION. IF ANY EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THE CONFLICT MAY BE RESOLVED.

8. ALL UTILITY CONNECTIONS TO EXISTING LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RULES AND REGULATIONS AND TO THE SATISFACTION OF THE APPLICABLE UTILITY OWNER(S).

9. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES AND ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.

10. ALL PROPERTY MARKERS AND REFERENCE MARKERS SHALL BE CAREFULLY PRESERVED DURING CONSTRUCTION UNTIL THEIR LOCATION HAS BEEN WITNESSED OR OTHERWISE TIED IN BY AN AUTHORIZED AGENT OR PROFESSIONALLY LICENSED SURVEYOR.

11. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE PROVIDED WHERE CONSTRUCTION OPERATIONS ABUT PUBLIC THROUGH-FARES AND ADJACENT PROPERTY.

12. ALL AREAS DISTURBED BY THE GENERAL CONTRACTOR OR SUB-CONTRACTORS SHALL BE RETURNED TO THE ORIGINAL CONDITIONS OR BETTER, EXCEPT WHERE PROPOSED CONSTRUCTION IS INDICATED ON THE PLANS.

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

14. PRIOR TO INITIAL ACCEPTANCE BY THE OWNER(S) AND/OR GOVERNING AUTHORITY, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER AND MUNICIPALITY ENGINEER OR HIS REPRESENTATIVE(S). THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF 18 (EIGHTEEN) MONTHS FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE WORKING CONDITIONS THROUGHOUT THE DURATION OF CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

16. CONTRACTOR SHALL KEEP THE PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS AND, WHEN NECESSARY, CLEAN PAVEMENTS AT THE END OF EACH WORKING DAY.

17. ALL CONSTRUCTION STAKING, SCHEDULING AND PAYMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

18. THREE (3) ORIGINAL COPIES OF ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR (BUT NOT LIMITED TO) THE FOLLOWING ITEMS:

18.1. ASPHALT PAVEMENT MIX DESIGN

18.2. CONCRETE MIX DESIGN

18.3. GRANULAR MATERIAL GRADATION

18.4. PRECAST CONCRETE STRUCTURES (MANHOLES, INLETS, CATCH BASINS, VAULTS, ETC.)

18.5. WATER MAIN MATERIALS (VALVES, FIRE HYDRANTS, ETC.)

19. AFTER COMPLETION OF THE PROPOSED IMPROVEMENTS AND WHEN REQUIRED BY THE GOVERNING AUTHORITY(S), CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH AS-BUILT AND/OR RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONALLY LICENSED ENGINEER OR SURVEYOR AND SHALL INCLUDE AT A MINIMUM (WHERE APPLICABLE TO THE SCOPE OF WORK) THE FOLLOWING ITEMS:

19.1. TOPOGRAPHY AND SPOT GRADE ELEVATIONS OF ALL PROPOSED PERMANENT SITE FEATURES INCLUDING ANY STORM WATER FACILITIES OR MODIFICATIONS TO EXISTING STORM WATER FACILITIES.

19.2. HORIZONTAL AND VERTICAL LOCATION AND ALIGNMENT OF ALL PROPOSED ROADWAYS, PARKING LOTS, UTILITIES, BUILDINGS OR OTHER PERMANENT SITE FEATURES.

19.3. RIM AND INVERT AND/OR TOP OF PIPE ELEVATIONS FOR ALL PROPOSED UTILITIES.

19.4. AS-BUILT AND/OR RECORD DRAWING INFORMATION SHALL BE SHOWN ON THE APPROVED ENGINEERING PLANS ISSUED FOR CONSTRUCTION. ANY AND ALL DEVIATIONS FROM THESE APPROVED PLANS SHALL BE SHOWN BY MEANS OF STRIKING THROUGH THE PROPOSED INFORMATION AND CLEARLY INDICATING THE AS-BUILT LOCATIONS AND ELEVATIONS ON THE APPLICABLE PLAN SHEET.

SITE GRADING AND PAVING

1. ALL SITE WORK, GRADING, AND PAVING OPERATIONS WITHIN THE LIMITS OF THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES, IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.

2. EARTH EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, CONSTRUCTION OF EMBANKMENTS, NON-STRUCTURAL FILLS, FINAL SHAPING AND TRIMMING TO THE LINES, GRADES AND CROSS SECTIONS SHOWN ON THE PLANS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 200 OF THE "STANDARD SPECIFICATIONS," ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR AS DIRECTED BY THE PROJECT REPRESENTATIVE IN THE FIELD.

3. EXCAVATED TOPSOIL SHALL BE STOCKPILED ON THE SITE IN AREAS DESIGNATED BY THE PROJECT ENGINEER UNTIL SUCH TIME THAT THIS TOPSOIL CAN BE USED FOR FINAL GRADING, UNLESS OTHERWISE NOTED ON THE PLANS. A MINIMUM OF 6" TOPSOIL, RE-SPREAD AND SEEDING FOR ALL DISTURBED AREAS IS REQUIRED.

4. THE SOILS INVESTIGATION REPORT FOR THE SITE AND ALL ADDENDA THERETO ARE SUPPORTING DOCUMENTS FOR THIS PROJECT. THE RECOMMENDATIONS AS STATED IN SAID REPORT ARE HEREBY INCORPORATED INTO THESE CONSTRUCTION NOTES BY REFERENCE AND SHALL BE FOLLOWED BY ALL CONTRACTORS. THE GRADING OPERATIONS ARE TO BE CLOSELY SUPERVISED AND INSPECTED, PARTICULARLY DURING THE REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS, BY A SOILS ENGINEER OR HIS REPRESENTATIVE. FURTHER CONSTRUCTION OPERATIONS WILL NOT BE PERMITTED UNTIL THE SOILS ENGINEER ISSUES A WRITTEN STATEMENT THAT THE AREA IN QUESTION HAS BEEN SATISFACTORILY PREPARED AND IS READY FOR CONSTRUCTION.

5. ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, UNSUITABLE SOIL REMOVAL AND ITS REPLACEMENT AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE CONTRACTOR.

6. THE CONTRACTOR SHALL USE CARE IN GRADING NEAR TREES, SHRUBS, AND BUSHES WHICH ARE NOT NOTED TO BE REMOVED SO AS NOT TO CAUSE INJURY TO ROOTS OR TRUNKS.

7. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO THESE EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT HIS OWN EXPENSE.

8. REMOVED DRIVEWAY PAVEMENT, SIDEWALK, CURBS, TREES AND STUMPS SHALL BE DISPOSED OF LEGALLY OFF-SITE AT LOCATIONS DETERMINED BY THE CONTRACTOR.

9. ON AND OFF SITE PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND, IF DAMAGED, SHALL BE REPLACED PROMPTLY TO MEET STATE AND LOCAL STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.

10. PROPOSED ELEVATIONS INDICATE FINISHED GRADE CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THE THICKNESS OF THE PROPOSED PAVING (ROADS, WALKS, DRIVE, ETC.) SECTION OR TOPSOIL AS INDICATED ON THE PLANS.

11. CONTRACTOR SHALL PROVIDE SMOOTH VERTICAL CURVES THROUGH THE HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS ON THE PLANS. CONTRACTOR SHALL PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES AND AVOID ANY RIDGES AND/OR DEPRESSIONS.

12. ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.

13. ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.

14. ALL CONCRETE POURED SHALL BE:

14.1. MINIMUM COMPRESSIVE STRENGTH:

14.1.1. 3500 P.S.I. AT 14 DAYS (PER I.D.O.T.)

14.1.2. 4500 P.S.I. AT 28 DAYS (PER A.C.I.)

14.2. MAX WATER-CEMENTITIOUS MATERIALS RATIO, 0.44 (AIR-ENTRAINED)

14.3. AIR CONTENT: 6%, +/- 1.5% AT POINT OF DELIVERY FOR EXPOSED CONCRETE

15. WHEN FIBER MESH REINFORCEMENT IS SPECIFIED, IT SHALL CONSIST OF FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE PAVEMENT, COMPLYING WITH ASTM C 1116, TYPE III, $\frac{1}{2}$ TO $\frac{3}{4}$ INCHES LONG. FIBERS SHALL BE UNIFORMLY DISPERSED IN THE CONCRETE MIXTURE AT THE MANUFACTURER'S RECOMMENDED RATE, BUT NOT LESS THAN 1.5 LBS / CU. YD.

16. THE GRADING AND CONSTRUCTION OF THE PROPOSED PAVEMENT IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE AND MATCH EXISTING GRADES FLUSH.


17. CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE END OF EACH WORKING DAY DURING CONSTRUCTION OPERATIONS. FAILURE TO PROVIDE ADEQUATE DRAINAGE WILL PRECLUDE THE CONTRACTOR FROM ANY POSSIBLE COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT.

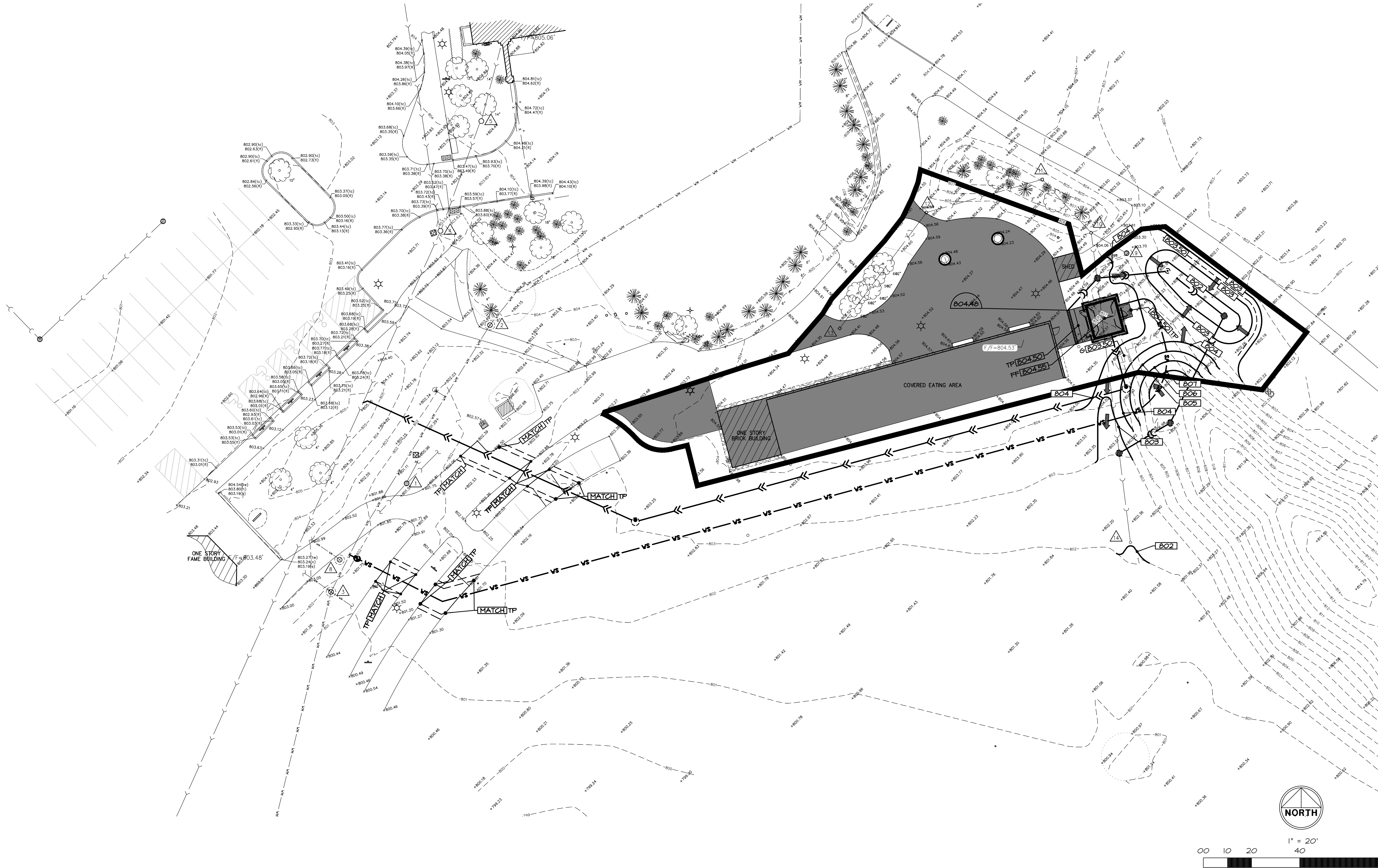
18. DRIVEWAYS SHALL BE CONSTRUCTED SO AS NOT TO IMPEDE THE SURFACE DRAINAGE SYSTEM.

19. TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS AND SHALL BE INSTALLED AND PROVIDED WHENEVER CONSTRUCTION FOR UTILITIES ARE WITHIN STREET AREAS. APPLICABLE ORDINANCES OF THE MUNICIPALITY, COUNTY OR STATE SHALL ALSO GOVERN THE TRAFFIC CONTROL REQUIREMENTS.

20. EXISTING PAVEMENT AGGREGATE BASE COURSE SHALL NOT BE RE-USED AS AGGREGATE BASE COURSE FOR THE NEW PAVEMENT SECTION.

 SANITARY SEWERS 1. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION, AND ALL SUBSEQUENT REVISIONS THERETO ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES, IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE. 2. ALL SANITARY SEWER PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION III OF THE "STANDARD SPECIFICATIONS." 3. ALL SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 PIPE PER ASTM D-3034 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D-3212, UNLESS OTHERWISE NOTED. 3.1. WHERE SANITARY SEWER PIPE IS NOTED AS PVC C-400, THE PIPE SHALL BE IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) C-400 WITH WATERTIGHT, PRESSURE RATED JOINTS CONFORMING TO ASTM D-3934. 4. SANITARY SEWER CONSTRUCTION SHALL COMMENCE AT THE EXISTING MANHOLE(S) AND/OR CONNECTION POINT(S) INDICATED ON THE PLANS. 4.1. A WATERTIGHT PLUG SHALL BE INSTALLED AND LEFT IN PLACE AT THE POINT OF COMMENCEMENT UNTIL THE REMAINDER OF THE PROPOSED SEWERS HAVE BEEN CONSTRUCTED, PROPERLY TESTED AND DEEMED READY FOR FINAL ACCEPTANCE. 5. ALL SANITARY SEWER TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF DIVISION II OF THE "STANDARD SPECIFICATIONS." 5.1. ALL SANITARY SEWERS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE, MATERIAL SHALL BE EXTENDED A MINIMUM OF 12" OVER THE TOP OF THE PIPE PER ASTM D-2921. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING IDOT GRADATION CA-II OR CA-13. 5.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY, PER ASTM D-1557, OVER ALL SANITARY SEWERS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS. 6. THE CONTRACTOR IS REQUIRED TO RECORD THE LOCATION OF ALL SEWERS AND FURNISH THE INFORMATION TO THE PROJECT ENGINEER AND/OR OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL LOCATE ALL SEWERS BY MEASUREMENTS TO LOT CORNERS OR OTHER PERMANENT SITE FEATURE AND SHALL FURNISH A COPY OF SUCH LOCATIONS TO THE PROJECT ENGINEER AND/OR OWNER'S REPRESENTATIVE UPON PROJECT COMPLETION. THIS INFORMATION SHALL ALSO INCLUDE THE DEPTH OF EACH SEWER. IF THE CONTRACTOR FAILS TO PROPERLY LOCATE ANY SEWER, HE SHALL BE RESPONSIBLE FOR ALL COSTS WHICH ARE INCURRED AS A RESULT OF THE IMPROPERLY LOCATED UTILITIES. 7. ALL SANITARY SEWER MANHOLES SHALL BE PRECAST CONCRETE AND SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF DIVISION III, SECTION 32 OF THE "STANDARD SPECIFICATIONS" AND THE DETAILS IN THE PLANS. 7.1. A FLEXIBLE TYPE JOINT SHALL BE FURNISHED AT POINTS OF ENTRY INTO AND EXITING FROM MANHOLE STRUCTURES AND SHALL BE OF A DESIGN APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. THIS FLEXIBLE JOINT MAY CONSIST OF A SLEEVE OF HIGH QUALITY SYNTHETIC RUBBER WITH A SUBSTANTIAL SERRATED FLANGE WHICH IS CAST DIRECTLY INTO THE WALL OF THE MANHOLE BASE TO FORM A WATERTIGHT SEAL AND PROTRUDES OUTSIDE OF THE MANHOLE WALL TO CONNECT WITH THE PIPE ENTERING/EXITING THE MANHOLE. WHEN THIS TYPE OF FLEXIBLE JOINT IS USED, THE SLEEVE SHALL SLIP OVER THE END OF THE PIPE ADJACENT TO THE MANHOLE BASE AND SHALL BE SECURED BY MEANS OF A STAINLESS STEEL STRAP CLAMP EQUIPPED WITH A DRAW BOLT AND NUT. 8. ALL REQUIRED MANHOLE RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYLDROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS. 9. AFTER FINAL ADJUSTMENTS HAVE BEEN MADE, ALL JOINTS IN PRECAST STRUCTURES SHALL BE MORTARED. THE MORTAR SHALL BE COMPOSED OF ONE (1) PART CEMENT TO THREE (3) PARTS SAND, BY VOLUME, BASED ON DRY MATERIALS, AND SHALL BE THOROUGHLY WETTED BEFORE LAYING. 10. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR MANHOLE, THE FOLLOWING METHOD SHALL BE USED: 10.1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE. 11. ALL FLOOR DRAINS SHALL BE CONNECTED TO THE SANITARY SEWER. ALL FOOTING DRAINS AND DOWNSPUTS SHALL DISCHARGE ONTO THE GROUND OR INTO THE STORM SEWER SYSTEM AS INDICATED ON THE DRAWINGS. 12. UPON COMPLETION OF THE SANITARY SEWER CONSTRUCTION, INCLUDING THE SERVICE LINES, ALL SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTIONS 31-112 AND 31-113 OF THE "STANDARD SPECIFICATIONS" AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY OR AUTHORIZED REPRESENTATIVE. | WATER MAINS 1. ALL WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION ("STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES, IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE. 2. ALL WATER MAIN PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION IV OF THE "STANDARD SPECIFICATIONS." 3. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE, CLASS 52 IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS C-151, C-111 AND C-104, UNLESS OTHERWISE NOTED. 4. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATER MAIN PIPE SHALL BE LAID WITH A MINIMUM COVER OF 5'-1/2' FEET FROM THE PROPOSED FINISH GRADE INDICATED ON THE PLANS OR TO THE SPECIFIC TOP OF PIPE ELEVATION INDICATED ON THE PLANS FOR THE WATER MAIN. NO BERMS ARE ALLOWED OVER WATER MAINS EXCLUSIVELY FOR THE PURPOSE OF OBTAINING ADEQUATE GROUND COVER. 5. ALL DUCTILE IRON WATER MAIN PIPE SHALL BE CONSTRUCTED WITH A MINIMUM OF 8-MIL POLYETHYLENE ENCASEMENT TO PREVENT CORROSION. 6. ALL WATER MAIN TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF DIVISION II OF THE "STANDARD SPECIFICATIONS". 6.1. ALL WATER MAINS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING IDOT GRADATION CA-7, CA-II OR CA-13. 6.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY, PER ASTM D-1557, OVER ALL WATER MAINS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS. 7. A WATERTIGHT PLUG SHALL BE PLACED IN THE END OF THE WATER MAIN PIPE AT THE END OF EACH CONSTRUCTION DAY. 8. UPON COMPLETION OF THE WATERMAIN CONSTRUCTION, ALL WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS: 8.1. HYDROSTATIC PRESSURE AND LEAKAGE TESTS IN ACCORDANCE WITH SECTION 41-214 OF THE "STANDARD SPECIFICATIONS" AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY. 8.2. DISINFECTION IN ACCORDANCE WITH SECTION 41-215 OF THE "STANDARD SPECIFICATIONS" AND THE METHODS STATED IN AWWA STANDARD C651 AND WITNESSED BY THE LOCAL GOVERNING AUTHORITY. 9. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSING. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN. 2. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN: 2.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN 1 ABOVE; OR 2.2. THE WATER MAIN PASSES UNDER A SEWER OR DRAIN 3. A VERTICAL SEPARATION OF EIGHTEEN (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, THE SEWER OR DRAIN LINES SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING OF THE WATER MAIN, AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER. 4. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET. | STORM SEWERS 1. ALL STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS," LATEST EDITION ("STANDARD SPECIFICATIONS"), THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION ("DOT STANDARD SPECIFICATIONS"), ANY SPECIAL PROVISIONS, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH THE CODES AND ORDINANCES OF THE GOVERNING AUTHORITIES, IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE. 2. ALL STORM SEWER PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION V OF THE "STANDARD SPECIFICATIONS" AND DIVISIONS 500 AND 600 OF THE "DOT STANDARD SPECIFICATIONS." 3. ALL PRECAST CONCRETE STRUCTURES SHALL BE REINFORCED AND DESIGNED FOR HS-20 LOADING UNLESS OTHERWISE NOTED. 4. ALL RCP STORM SEWER PIPE 12" IN DIAMETER AND LARGER SHALL BE REINFORCED CONCRETE PIPE, CLASS IV, PER ASTM C-76 WITH FLEXIBLE (O-RING) GASKET JOINTS IN CONFORMANCE WITH ASTM C-443 AND SECTION 31-1.08 OF THE "STANDARD SPECIFICATIONS." ALL 10" DIAMETER RCP STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, CLASS V. 5. ALL HDPE STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE PER ASTM F-2306 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D-3212. 6. ALL PVC STORM SEWER PIPE SHALL BE POLYVINYL CHLORIDE SDR 26 PIPE PER ASTM D-3034 WITH WATERTIGHT JOINTS CONFORMING TO ASTM D-3212, UNLESS OTHERWISE NOTED. 7. ALL STORM SEWER TRENCH EXCAVATIONS AND PIPE FOUNDATION, BEDDING AND HAUNCHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF DIVISION II OF THE "STANDARD SPECIFICATIONS". 7.1. ALL STORM SEWERS MUST BE PLACED ON PROPERLY COMPACTED STONE BEDDING. PIPE BEDDING MATERIAL SHALL BE A MINIMUM OF FOUR (4) INCHES THICK UNDER THE BARREL OF THE PIPE AND FOR PVC PIPE, MATERIAL SHALL BE EXTENDED A MINIMUM OF 12" OVER THE TOP OF THE PIPE PER ASTM D-2921. PIPE BEDDING MATERIAL SHALL BE CRUSHED GRAVEL OR STONE MEETING IDOT GRADATION CA-7, CA-II OR CA-13. 7.2. TRENCH BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY, PER ASTM D-1557, OVER ALL STORM SEWERS WHICH ARE CONSTRUCTED UNDER, OR WITHIN TWO (2) FEET OF, ANY PROPOSED OR EXISTING PAVEMENT, PARKING LOTS OR SIDEWALKS. 8. ALL REQUIRED STORM STRUCTURE RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYLDROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS. 9. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR EXTENDED TO CUT INTO A PROPOSED DRAINAGE WAY. IF THIS CANNOT BE ACCOMPLISHED, THEN IT SHALL BE REPAIRED WITH NEW PIPE OF SIMILAR SIZE AND MATERIAL TO THE ORIGINAL LINE AND PUT IN ACCEPTABLE OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE OWNER AND/OR ENGINEER UPON COMPLETION OF THE PROJECT AND ACCURATELY SHOWN ON THE RECORD DRAWINGS. | WATER MAINS AND SEWERS VERTICAL SEPARATION REQUIREMENTS 1. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSING. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN. 2. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN: 2.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN 1 ABOVE; OR 2.2. THE WATER MAIN PASSES UNDER A SEWER OR DRAIN 3. A VERTICAL SEPARATION OF EIGHTEEN (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, THE SEWER OR DRAIN LINES SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING OF THE WATER MAIN, AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER. 4. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET. | WATER SERVICES AND CONNECTIONS 1. ALL WATER SERVICE PIPE AND STRUCTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH DIVISION IV OF THE "STANDARD SPECIFICATIONS." 2. ALL WATER SERVICE LINES 2" IN DIAMETER OR SMALLER SHALL BE TYPE 1K' COPPER TUBING CONFORMING TO ASTM B-88-58. NO COUPLINGS SHALL BE PERMITTED BETWEEN THE CORPORATION AND CURB STOPS OR BETWEEN THE CURB STOP AND THE BUILDING. 3. ALL WATER SERVICE FITTINGS INCLUDING CORPORATION STOPS, SERVICE BOXES AND BUFFALO BOXES SHALL BE AS MANUFACTURED BY THE MUELLER COMPANY OR APPROVED EQUAL. 4. SERVICE BOXES SHALL BE OF SUFFICIENT LENGTH TO PERMIT THE TOP TO BE INSTALLED FLUSH WITH THE FINISHED GRADE. EACH SERVICE BOX SHALL BE PROVIDED WITH A CAP WITH THE WORD "WATER" CAST IN THE TOP. 5. ALL VALVES, VALVE BOXES OR VAULTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF DIVISION IV, SECTION 44 OF THE "STANDARD SPECIFICATIONS." 6. VALVES SHALL BE AMERICAN FLOW CONTROL SERIES 2500 DUCTILE IRON RESILIENT SEAT EPOXY COATED WEDGE VALVES OR APPROVED EQUAL. 7. ALL PRESSURE CONNECTIONS TO THE EXISTING WATER MAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 46 OF THE "STANDARD SPECIFICATIONS" AND SHALL INCLUDE THE INSTALLATION OF A FULL STAINLESS STEEL TAPPING SADDLE. 8. ALL VALVES SHALL BE INSTALLED IN VALVE VAULTS HAVING A MINIMUM DIAMETER OF FIVE (5) FEET BELOW THE PRECAST CONCRETE CONE SECTION. THE VAULTS SHALL BE CONSTRUCTED OF PRECAST CONCRETE SECTIONS AND SHALL CONFORM TO THE DETAILS SPECIFIED ON THE PLANS. ALL VALVE VAULTS SHALL BE LEAK PROOF. 9. ALL TEMPORARY CONNECTIONS FOR CONSTRUCTION PURPOSES TO NEWLY INSTALLED OR EXISTING WATER MAINS SHALL BE MADE AND METERED IN ACCORDANCE WITH LOCAL REQUIREMENTS. 10. ALL REQUIRED RIM ADJUSTMENTS SHALL BE MADE WITH PRECAST CONCRETE ADJUSTING RINGS NOT TO EXCEED A MAXIMUM OF EIGHT (8) INCHES IN OVERALL HEIGHT. A MAXIMUM OF TWO (2) ADJUSTING RINGS ARE ALLOWED. BUTYLDROPE JOINT SEALANT SHALL BE USED ON ALL JOINTS BETWEEN THE PRECAST ELEMENTS. | BRIDGES TOP TRACER BATHROOM UTILITIES 1400 POPLAR CREEK DRIVE HOFFMAN ESTATES, IL 60169 BRIDGES OF POPLAR CREEK WT GROUP Engineering with Precision, Pace and Passion. 2875 Prichard Avenue Hoffman Estates, IL 60192 T: 224.293.6333 | F: 224.293.6444 wtengineering.com Group Engineering • Design • Consulting AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY CHECK: TOA DRAWN: VE JOB: C2200007 C-6.0 PROJECT SPECIFICATIONS ||

<div><div>A. REFERENCED SPECIFICATIONS</div><div>1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS: * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION; * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION; * VILLAGE OF HOFFMAN ESTATES MUNICIPAL CODE; * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL; * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.</div><div>B. NOTIFICATIONS</div><div>1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).</div><div>2. THE VILLAGE OF HOFFMAN ESTATES ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.</div><div>3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.</div><div>C. GENERAL NOTES</div><div>1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS _____ FT.</div><div>2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.</div><div>3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.</div><div>4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.</div><div>5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.</div><div>6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.</div><div>7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.</div><div>8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.</div><div>9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.</div><div>10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.</div><div>D. SANITARY SEWER</div><div>1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.</div><div>2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.</div><div>3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.</div><div>4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).</div><div>5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.</div><div>6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.</div><div>7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:</div></div>		<div><div>PIPE MATERIAL</div><div>VITRIFIED CLAY PIPE</div><div>REINFORCED CONCRETE SEWER PIPE</div><div>CAST IRON SOIL PIPE</div><div>DUCTILE IRON PIPE</div><div>POLYVINYL CHLORIDE (PVC) PIPE 6-INCH TO 15-INCH DIAMETER SDR 26 18-INCH TO 27-INCH DIAMETER F/DY=46</div><div>HIGH DENSITY POLYETHYLENE (HDPE)</div><div>WATER MAIN QUALITY PVC 4-INCH TO 36-INCH 4-INCH TO 12-INCH 14-INCH TO 48-INCH</div><div>THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.</div><div>PIPE MATERIAL</div><div>POLYPROPYLENE (PP) PIPE</div><div>12-INCH TO 24-INCH DOUBLE WALL</div><div>30-INCH TO 60-INCH TRIPLE WALL</div><div>8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.</div><div>9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.</div><div>10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.</div><div>11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED: a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE. b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION. c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.</div><div>12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.</div><div>13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.</div><div>14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.</div><div>15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.</div><div>16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.</div><div>17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.</div><div>18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.</div></div>	<div><div>E. EROSION AND SEDIMENT CONTROL</div><div>1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.</div><div>2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.</div><div>3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.</div><div>4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.</div><div>5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM: a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE. b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.</div><div>6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.</div><div>7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.</div><div>8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.</div><div>9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.</div><div>10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.</div><div>12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.</div><div>13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).</div><div>14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.</div><div>15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.</div><div>16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.</div><div>17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.</div><div>18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.</div><div>19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.</div><div>20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.</div><div>21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.</div><div>22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.</div><div>23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.</div><div>24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.</div></div>	
<div><div></div></div>	TECHNICAL GUIDANCE MANUAL		07/12/2016	
	MWRD GENERAL NOTES		STD. DWG. NO.18	
			PAGE NO. 19	
<div><div><div><div><div><div></div><div>WT GROUP</div><div>Engineering with Precision, Pace and Passion.</div><div>2875 Prichard Avenue Hoffman Estates, IL 60192</div><div>T: 224.293.6333 F: 224.293.6444</div><div>wengineering.com</div><div>IL License No: 184.0075702015 Expires 04.30.2023</div><div>© COPYRIGHT 2022 THE WT GROUP, LLC</div></div></div><div><div>WT Group</div><div>Engineering • Design • Consulting</div></div></div><div><div>BRIDGES TOP TRACER</div><div>BATHROOM UTILITIES</div><div>1400 POPLAR CREEK DRIVE</div><div>HOFFMAN ESTATES, IL 60169</div><div>BRIDGES OF POPLAR CREEK</div></div><div><div>ISSUE</div><div>TO _____ DATE _____</div><div>ISSUED FOR BID 3-1-22</div><div>_____</div><div>_____</div><div>_____</div><div>_____</div><div>_____</div></div><div><div>CHECK: TOA</div><div>DRAWN: VE</div><div>JOB: C2200007</div><div>C-7.0</div><div>MWRD GENERAL NOTES</div></div></div></div>				



AREA	
PERVIOUS	
IMPERVIOUS	
GRAVEL	

AREA	AREA 1
PERVIOUS	0.17
IMPERVIOUS	0.19
GRAVEL	0.01
TOTAL	0.37

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BRIDGES TOP TRACER

BATHROOM UTILITIES

1400 POPLAR CREEK DRIVE

HOFFMAN ESTATES, IL 60169

BRIDGES OF POPLAR CREEK

ISSUE

TO DATE

ISSUED FOR BID 3-1-22

CHECK: TOA

DRAWN: VE

JOB: C2200007

EX-1.0

PROPOSED CONDITION

EXHIBIT

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY



AREA	
PERVIOUS	
IMPERVIOUS	
GRAVEL	

AREA	AREA 1
PERVIOUS	0.17
IMPERVIOUS	0.19
GRAVEL	0.01
TOTAL	0.37

PROJECT SITE SUMMARY

PROPERTY LEGAL DESCRIPTION: SECTION 7, TOWNSHIP 41N, RANGE 10E
PROPERTY ADDRESS: 1400 POPLAR CREEK DRIVE, HOFFMAN ESTATES, IL 60192
PROPERTY INDEX NUMBERS: 07-07-401-004; 07-07-401-004
TOTAL CONTIGUOUS OWNERSHIP: 160.62 ACRES
PROJECT AREA: 0.31 ACRES

STORMWATER SUMMARY

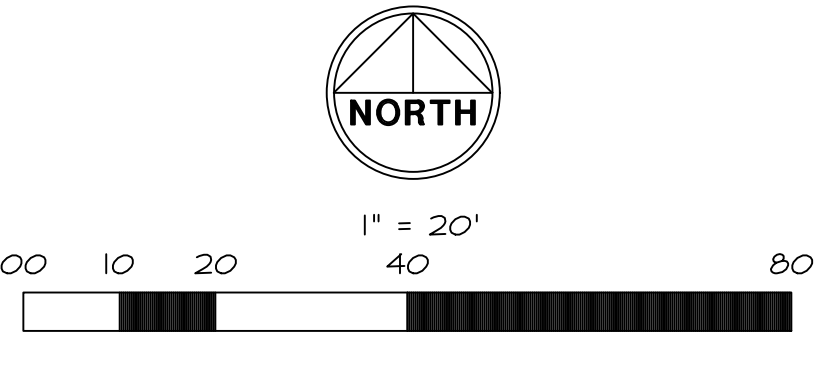
REQUIRED VOLUME CONTROL = 0.016 AC-FT
PROVIDED VOLUME CONTROL = 0.020 AC-FT
DETENTION VOLUME DEFERRED.

MAINTENANCE SCHEDULE

- THE FOLLOWING MAINTENANCE TASKS SHALL BE PERFORMED BY HOFFMAN ESTATES PARK DISTRICT AT THE REQUIRED FREQUENCY AS DESCRIBED BELOW:
- REGULAR INSPECTIONS AND ROUTINE MAINTENANCE OF GENERAL AREAS SHALL BE PERFORMED ON A MONTHLY OR AS-NEEDED BASIS. SPECIFIC ITEMS OF CONCERN INCLUDED:
 - A. LITTER AND DEBRIS SHALL BE CONTROLLED.
 - B. LANDSCAPED AREAS SHALL BE MAINTAINED WITH REGULAR MOWING AND RESTORATION WITH APPROPRIATE SEEDING/VEGETATION AS NECESSARY.
 - C. ACCUMULATED SEDIMENT SHALL BE DISPOSED OF PROPERLY, ALONG WITH ANY WASTES GENERATED DURING MAINTENANCE OPERATIONS.
 - D. RIPRAP AREAS SHALL BE REPAIRED WITH THE ADDITION OF NEW RIPRAP, AS NECESSARY, OF SIMILAR SIZE AND SHAPE.
 - E. ROADS SHALL BE SWEEP, VACUUMED AND/OR WASHED ON A REGULAR BASIS.
 - ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED AFTER EACH 0.50 INCHES OF RAINFALL AND/OR ONCE A WEEK AND ALL IMPERVIOUS ROAD SURFACES SHALL BE CLEANED PRIOR TO THE END OF EACH WORKING DAY.
 - CUT THE GRASS ON SLOPES IN OPEN SPACE, WEEKLY DURING GROWING SEASON.
 - RAIN GARDEN FACILITY:
 - a. CUT THE TURF GRASS AREAS OUTSIDE OF THE NATIVE PLANTING AREAS OF THE RAIN GARDENS, WEEKLY DURING GROWING SEASON.
 - b. INSPECT RAIN GARDEN FACILITIES TO ENSURE THAT THE CONSTRUCTED VOLUME FOR VOLUME CONTROL IS MAINTAINED.
 - c. DEBRIS REMOVAL, TRASH, BRUSH, GRASS CLIPPINGS, SEDIMENT, AND OTHER DEBRIS SHOULD BE REMOVED FROM THE RAIN GARDEN FACILITIES TO MAINTAIN THE DESIGNED VOLUME STORAGE. TO PREVENT CLOGGING, THE OUTLET CONTROL STRUCTURE SHOULD ALSO BE INSPECTED AND ALL DEBRIS SHOULD BE REMOVED, MONTHLY.
 - d. RESTORATION OF ERODED AREAS, FOR AREAS WHERE THERE IS EVIDENCE OF EROSION, OR IN AREAS WHERE FUTURE EROSION IS LIKELY, PROTECTION SHOULD BE PROVIDED TO PREVENT FURTHER DAMAGE. ALL BARE AREAS SHOULD BE SEEDED AND RESTORED. AREAS LOCATED ALONG THE SIDE SLOPES OF THE RAIN GARDEN FACILITIES WILL REQUIRE SEEDING IN CONJUNCTION WITH AN EROSION CONTROL BLANKET, MONTHLY.
 - STORMWATER FACILITY/COMPENSATORY STORAGE/VOLUME CONTROL FACILITY:
 - a. INSPECT STORMWATER DETENTION FACILITY TO ENSURE THAT THE CONSTRUCTED VOLUME FOR DETENTION IS MAINTAINED. SPECIFIC LOCATIONS IN THE STORMWATER MANAGEMENT SYSTEM, DESIGNED TO ACCUMULATE SEDIMENT, SHALL BE DREDGED AS NECESSARY TO PREVENT SEDIMENT FROM REACHING THE INVERT OF ANY GRAVITY OUTLET PIPE, MONTHLY.
 - b. DEBRIS REMOVAL, TRASH, BRUSH, GRASS CLIPPINGS, SEDIMENT, AND OTHER DEBRIS SHOULD BE REMOVED FROM THE DETENTION FACILITY TO MAINTAIN THE DESIGNED STORAGE VOLUME. TO PREVENT CLOGGING, THE OUTLET CONTROL STRUCTURE SHOULD ALSO BE INSPECTED AND ALL DEBRIS SHOULD BE REMOVED, MONTHLY.
 - c. RESTORATION OF ERODED AREAS, FOR AREAS WHERE THERE IS EVIDENCE OF EROSION, OR IN AREAS WHERE FUTURE EROSION IS LIKELY, PROTECTION SHOULD BE PROVIDED TO PREVENT FURTHER DAMAGE. ALL BARE AREAS SHOULD BE SEEDED AND RESTORED. AREAS LOCATED ALONG THE SIDE SLOPES OF THE DETENTION FACILITY
 - MINOR STORMWATER SYSTEM:
 - A. DEBRIS REMOVAL, TRASH, WOOD CHIPS, GRASS CLIPPINGS, SEDIMENT, AND OTHER DEBRIS SHOULD BE REMOVED FROM THE CATCH BASINS, INLETS, OUTFALLS, AND STORM SEWERS TO PREVENT CLOGGING. CLEANING SHOULD BE DONE IN SUCH A WAY THAT THE DEBRIS IS NOT DISCHARGED BACK INTO THE STORMWATER SYSTEM, EVERY TWO WEEKS.
 - B. RESET COVERS/LIDS ON AS-NEEDED BASIS.
 - C. REMOVE ACCUMULATED SEDIMENT FROM MANHOLE BOTTOM WHEN 50% OF SUMP IS FILLED.
 - D. VISUALLY INSPECT PIPES BY REMOVING MANHOLE LIDS, MAKE REPAIRS AS NECESSARY.
 - E. STORM SEWERS SHALL BE CHECKED FOR SILTATION DEPOSITS AT INLETS, OUTLETS, AND WITHIN THE CONDUIT, CLEAN OUT AS NECESSARY.
 - F. RESTORE RIPRAP AT OUTFALLS IF EROSION IS OBSERVED.
 - G. REPLANT AND RESEED ANY ERODED AREAS.
 - H. REMOVAL OF OBSTRUCTIONS. INSPECTIONS SHOULD BE PERFORMED TO ENSURE THAT ALL OVERLAND FLOW ROUTES ARE FREE FROM OBSTRUCTIONS. IF AN OBSTRUCTION HAS BEEN PLACED IN AN OVERLAND FLOW ROUTE, IT SHOULD BE REMOVED IMMEDIATELY, EVERY TWO WEEKS.
 - OVERFLOW WEIR:
 - a. REMOVAL OF OBSTRUCTIONS. INSPECTIONS SHOULD BE PERFORMED TO ENSURE THAT THE OVERFLOW WEIR IS FREE FROM OBSTRUCTIONS. IF AN OBSTRUCTION HAS BEEN PLACED IN THE OVERFLOW WEIR, IT SHOULD BE REMOVED IMMEDIATELY, EVERY TWO WEEKS.
 - b. RESTORE RIPRAP AS NECESSARY.
 - c. RESHADE TO PROVIDE POSITIVE DRAINAGE AS NECESSARY.
 - d. REGULAR MOWING TO CONTROL VEGETATION.

CIVIL ENGINEERING STATEMENT AND SEAL
I, TODD ABRAMS, P.E., DULY LICENSED IN THE STATE OF ILLINOIS BY THE DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION, DO HEREBY STATE THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF DOES CONFORM TO THE APPLICABLE BUILDING CODES AND ORDINANCES, AND ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT [410 ILCS 25] AND THE ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400).

TODD ABRAMS - ILLINOIS P.E. # 062-061600
DATE OF EXPIRATION - NOVEMBER 30, 2023

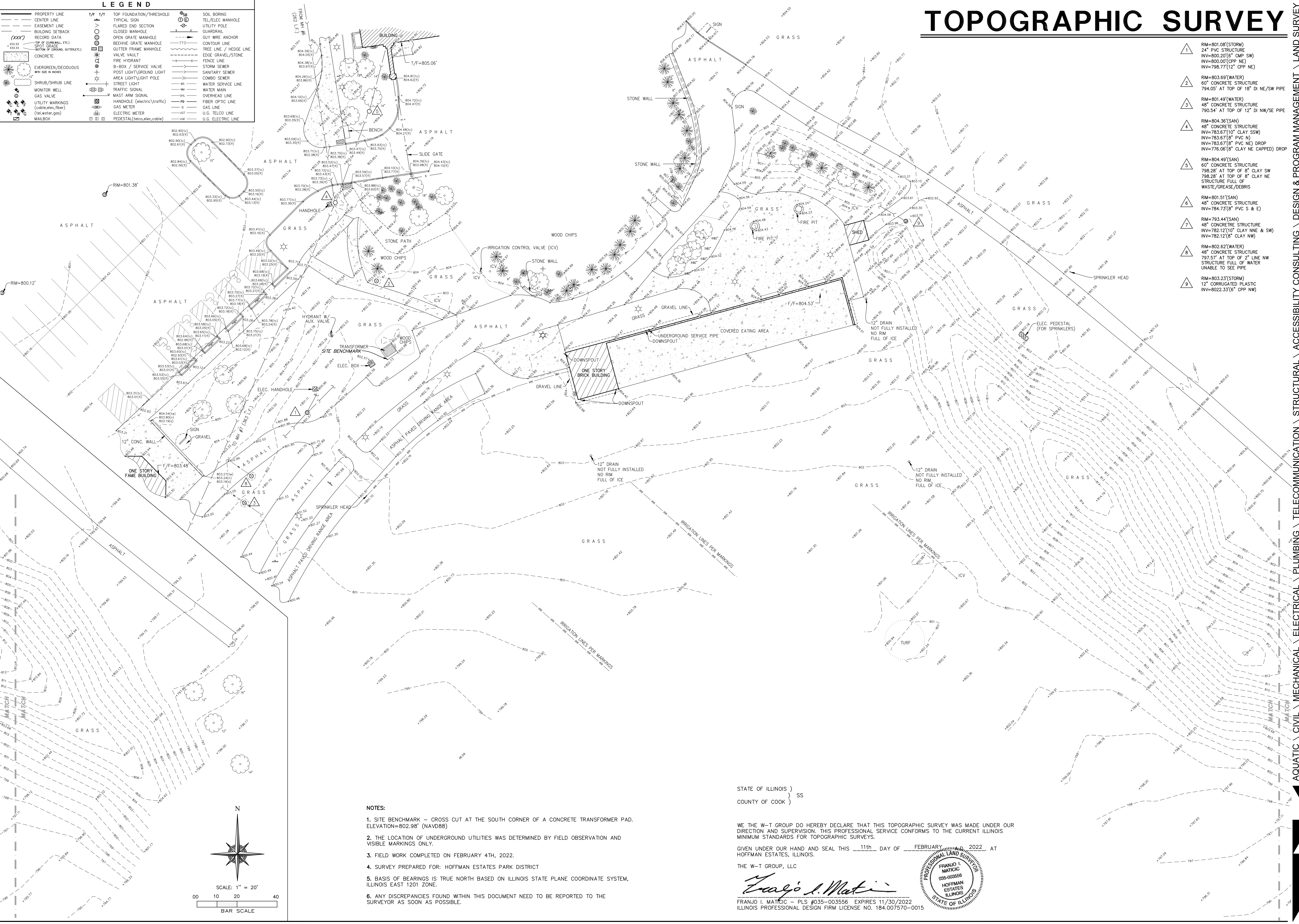


RAIN GARDEN SECTION A-A
NOT TO SCALE

TOPOGRAPHIC SURVEY

LEGEND

PROPERTY LINE	T/F T/F	TOP FOUNDATION/THRESHOLD	SOIL BORING
CENTER LINE	FLARED END SECTION	TYPICAL SIGN	TEL/ELEC MANHOLE
EASEMENT LINE	CLOSED MANHOLE	UTILITY POLE	GUARDRAIL
BUILDING SETBACK	OPEN GRATE MANHOLE	GUARDRAIL	GUY WIRE ANCHOR
RECORD DATA	BEEHIVE GRATE MANHOLE	CONTOUR LINE	CONTOUR LINE
TOP OF CURB (ELEV. ETC.)	OUTTER FRAME MANHOLE	TREE LINE / HEDGE LINE	TREE LINE / HEDGE LINE
SPOT GRADE	VALVE VAULT	EDGE GRAVEL/STONE	EDGE GRAVEL/STONE
BOTTOM OF (DRAINAGE, OUTLET, ETC.)	FIRE HYDRANT	FENCE LINE	FENCE LINE
CONCRETE	B-BOX / SERVICE VALVE	STORM SEWER	STORM SEWER
EVERGREEN/DECIDUOUS	POST LIGHT/GROUND LIGHT	SANITARY SEWER	SANITARY SEWER
WITH SIZE IN INCHES	AREA LIGHT/UTILITY POLE	WATER SERVICE LINE	WATER SERVICE LINE
SHRUB/SHRUB LINE	STREET LIGHT	OVERHEAD LINE	OVERHEAD LINE
MONITOR WELL	TRAFFIC SIGNAL	FIBER OPTIC LINE	FIBER OPTIC LINE
GAS VALVE	MAST ARM SIGNAL	GAS LINE	GAS LINE
UTILITY MARKINGS	HANDHOLE (electric/traffic)	U.G. TELCO LINE	U.G. TELCO LINE
(cable,elec, fiber)	GAS METER	U.G. ELECTRIC LINE	U.G. ELECTRIC LINE
(tel,water,gas)	ELECTRIC METER		
MAILBOX	PEDESTAL (telco,elec,cable)		



- 1 RIM=801.08'(STORM) 24" PVC STRUCTURE INV=800.20'(6" CMP SW) INV=800.00'(CPP NE) INV=798.77'(12" CPP NE)
- 2 RIM=803.69'(WATER) 60" CONCRETE STRUCTURE 794.05' AT TOP OF 18" DI NE/SW PIPE
- 3 RIM=801.49'(WATER) 48" CONCRETE STRUCTURE 790.54' AT TOP OF 12" DI NW/SE PIPE
- 4 RIM=804.36'(SAN) 48" CONCRETE STRUCTURE INV=783.67'(10" CLAY SSW) INV=783.67'(8" PVC N) INV=783.67'(8" PVC NE) DROP INV=776.06'(8" CLAY NE CAPPED) DROP
- 5 RIM=804.49'(SAN) 60" CONCRETE STRUCTURE 798.28' AT TOP OF 8" CLAY SW 798.28' AT TOP OF 8" CLAY NE STRUCTURE FULL OF WASTE/GREASE/DEBRIS
- 6 RIM=801.51'(SAN) 48" CONCRETE STRUCTURE INV=784.73'(8" PVC S & E)
- 7 RIM=793.44'(SAN) 48" CONCRETE STRUCTURE INV=782.12'(10" CLAY NNE & SW) INV=782.12'(8" CLAY NW)
- 8 RIM=802.62'(WATER) 48" CONCRETE STRUCTURE 797.57' AT TOP OF 2" LINE NW STRUCTURE FULL OF WATER UNABLE TO SEE PIPE
- 9 RIM=803.23'(STORM) 12" CORRUGATED PLASTIC INV=802.33'(6" CPP NW)

NOTES:

1. SITE BENCHMARK — CROSS CUT AT THE SOUTH CORNER OF A CONCRETE TRANSFORMER PAD. ELEVATION=802.98' (NAVD88)
2. THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION AND VISIBLE MARKINGS ONLY.
3. FIELD WORK COMPLETED ON FEBRUARY 4TH, 2022.
4. SURVEY PREPARED FOR: HOFFMAN ESTATES PARK DISTRICT
5. BASIS OF BEARINGS IS TRUE NORTH BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, ILLINOIS EAST 1201 ZONE.
6. ANY DISCREPANCIES FOUND WITHIN THIS DOCUMENT NEED TO BE REPORTED TO THE SURVEYOR AS SOON AS POSSIBLE.

STATE OF ILLINOIS)
COUNTY OF COOK) SS

WE THE W-T GROUP DO HEREBY DECLARE THAT THIS TOPOGRAPHIC SURVEY WAS MADE UNDER OUR DIRECTION AND SUPERVISION. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYS.

GIVEN UNDER OUR HAND AND SEAL THIS 11th DAY OF FEBRUARY, 2022 AT HOFFMAN ESTATES, ILLINOIS.

THE W-T GROUP, LLC

FRANJO L. MATCIC
035-003556
HOFFMAN ESTATES ILLINOIS
STATE OF ILLINOIS

FRANJO L. MATCIC - PLS #035-003556 EXPIRES 11/30/2022
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184.007570-0015

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WT Group
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BRIDGES OF POPLAR CREEK
1400 POPLAR CREEK DRIVE
HOFFMAN ESTATES, ILLINOIS

AQUATIC \ CIVIL \ MECHANICAL \ ELECTRICAL \ PLUMBING \ TELECOMMUNICATION \ STRUCTURAL \ ACCESSIBILITY CONSULTING \ DESIGN & PROGRAM MANAGEMENT \ LAND SURVEY

ISSUE

TO	DATE
CLIENT	2/11/22

CHECK-FIRM
DRAWN: REM
JOB: C2200007

SUR-1
SHEET 1 OF 1
TOPOGRAPHIC SURVEY