

# **Proposed Improvements for PROPOSED RETAIL DEVELOPMENT**

## STANDARD SYMBOLS

<b>EXISTING</b>	<b>PROPOSED</b>
—>— >— >—	STORM SEWER
—>— >— >—	SANITARY SEWER
—D— D—	COMBINED SEWER
→ —FM— —	FORCEMAIN
>>— >>—	DRAINTILE
— W —	WATER MAIN
— E —	ELECTRIC
— G —	GAS
— T —	TELEPHONE
— OH —	OVERHEAD WIRES
○	SANITARY MANHOLE
○	STORM MANHOLE
○	CATCH BASIN
□	STORM INLET
○	CLEANOUT
○	HAY BALES
○	RIP RAP
☒	VALVE IN VAULT
☒	VALVE IN BOX
○	FIRE HYDRANT
○	BUFFALO BOX
○	FLARED END SECTION
○	STREET LIGHT
○	SUMMIT / LOW POINT
795.20 790.25	RIM ELEVATION INVERT ELEVATION
—>—	DITCH OR SWALE
—>—	DIRECTION OF FLOW
—>—	OVERFLOW RELIEF SWALE
—>—	1 FOOT CONTOURS
—>—	CURB AND GUTTER
—>—	DEPRESSED CURB AND GUTTER
—>—	REVERSE CURB AND GUTTER
—>—	SIDEWALK
—>—	DETECTABLE WARNINGS
—>—	PROPERTY LINE
—>—	EASEMENT LINE
—>—	SETBACK LINE
—>—	MAIL BOX
—>—	SIGN
—>—	TRAFFIC SIGNAL
—>—	POWER POLE
—>—	GUY WIRE
—>—	GAS VALVE
—>—	HANDHOLE
—>—	ELECTRICAL EQUIPMENT
—>—	TELEPHONE EQUIPMENT
—>—	CHAIN-LINK FENCE
—>—	SPOT ELEVATION
—>—	BRUSH/TREE LINE
+700.00	DECIDUOUS TREE WITH TRUNK DIA. IN INCHES (TBR)
16"	CONIFEROUS TREE WITH HEIGHT IN FEET (TBR)
25'	SILT FENCE
S	RETAINING WALL
	WETLAND

## ABBREVIATIONS

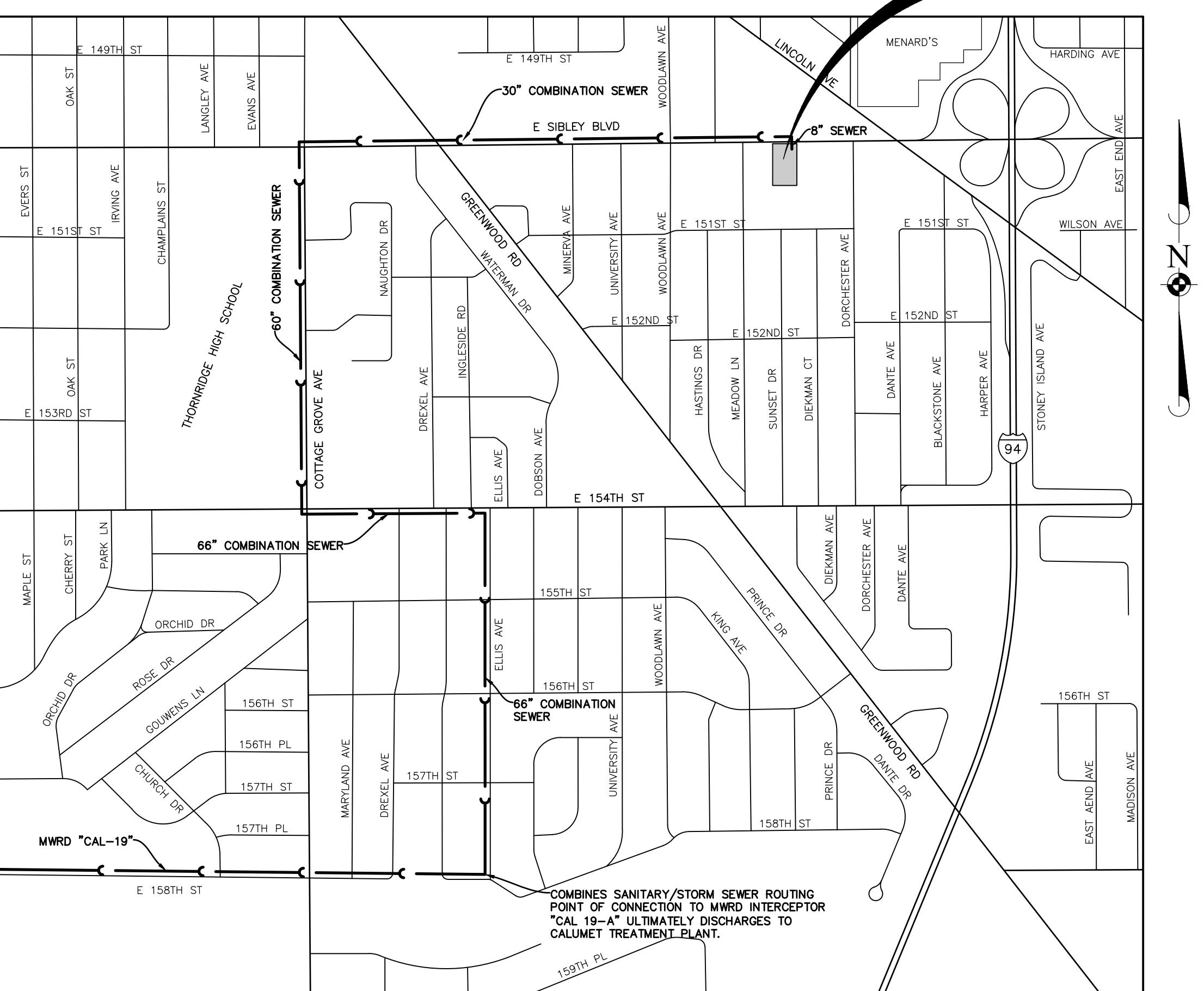
ADJ	ADJUST	F/L	FLOW LINE	R.O.W.	RIGHT-OF-WAY
AGG.	AGGREGATE	FM	FORCE MAIN	RCP	REINFORCED CONCRETE
ARCH	ARCHITECT	G	GROUND	REM	REMOVAL
B.A.M.	BITUMINOUS AGGREGATE MIXTURE	G/F	GRADE AT FOUNDATION	REV	REVERSE
B-B	BACK TO BACK	GW	GUY WIRE	RR	RAILROAD
B/C	BACK OF CURB	HDWL	HEADWALL	RT	RIGHT
B/P	BOTTOM OF PIPE	HH	HANDHOLE	SAN	SANITARY
B/W	BACK OF WALK	HWL	HIGH WATER LEVEL	SF	SQUARE FOOT
B-BOX	BUFFALO BOX	HYD.	HYDRANT	SHLD.	SHOULDER
BIT.	BITUMINOUS	INL	INLET	SL	STREET LIGHT
BM	BENCHMARK	INV.	INVERT	SMH	SANITARY MANHOLE
B.O.	BY OTHERS	IP	IRON PIPE	ST	STORM
C.E.	COMMERCIAL ENTRANCE	LT	LEFT	STA.	STATION
CB	CATCH BASIN	MAX.	MAXIMUM	STD	STANDARD
¢	CENTERLINE	MB	MAILBOX	SW	SIDEWALK
CMP	CORRUGATED METAL PIPE	M/E	MEET EXISTING	SY	SQUARE YARDS
CNTRL	CONTROL	MH	MANHOLE	TBR	TO BE REMOVED
C.O.	CLEANOUT	MIN.	MINIMUM	T	TELEPHONE
CONC.	CONCRETE	NWL	NORMAL WATER LEVEL	T-A	TYPE A
CY	CUBIC YARD	P.E.	PRIVATE ENTRANCE	T/C	TOP OF CURB
D	DITCH	PC	POINT OF CURVATURE	T/F	TOP OF FOUNDATION
DIA.	DIAMETER	PCC	POINT OF COMPOUND CURVE	T/P	TOP OF PIPE
DIP	DUCTILE IRON PIPE	PGL	PROFILE GRADE LINE	T/W	TOP OF WALK
DIWM	DUCTILE IRON WATER MAIN	PI	POINT OF INTERSECTION	T/WALL	TOP OF WALL
DS	DOWNSPOUT	P	PROPERTY LINE	TEMP	TEMPORARY
DT	DRAIN TILE	PP	POWER POLE	TRANS	TRANSFORMER
E	ELECTRIC	PROP.	PROPOSED	V.B.	VALVE BOX
E-E	EDGE TO EDGE	PT	POINT OF TANGENCY	VCP	VITRIFIED CLAY PIPE
ELEV.	ELEVATION	PVC	POLYVINYL CHLORIDE PIPE	V.V.	VALVE VAULT
E/P	EDGE OF PAVEMENT	PVC	POINT OF VERTICAL CURVATURE	WL	WATER LEVEL
EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION	WM	WATER MAIN
F.E.	FIELD ENTRANCE	PVT	POINT OF VERTICAL TANGENCY		
F-F	FACE TO FACE	P	PAVEMENT		
F.F.	FINISHED FLOOR	P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT		
FES	FLARED END SECTION	R	RADIUS		

# Proposed Improvements

for

# **1317 EAST SIBLEY BOULEVARD VILLAGE OF DOLTON, ILLINOIS**

# PROJECT LOCATION



## LOCATION MAP

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DEPARTMENT PROPERTY GROUP, LLC  
200 W. MADISON ST, SUITE 4200  
CHICAGO, ILLINOIS 60606  
(312) 332-4172



# Manhard

CONSULTING LTD.

MANHARD CONSULTING, LTD. IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.

# INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	ALTA-NSPS LAND TITLE SURVEY
3	EXISTING CONDITIONS AND DEMOLITION PLAN
4	SITE DIMENSIONAL AND PAVING PLAN
5	GRADING PLAN
6	UTILITY PLAN
7	MWRD EXHIBIT
8	SOIL EROSION AND SEDIMENT CONTROL PLAN
9	CONSTRUCTION DETAILS
10	CONSTRUCTION DETAILS
11	CONSTRUCTION DETAILS
12	CONSTRUCTION DETAILS
13	CONSTRUCTION SPECIFICATIONS

## DRAINAGE NARRATIVE:

I, *Kim Edin*, HEREBY CERTIFY THAT ADEQUATE STORMWATER STORAGE AND DRAINAGE CAPACITY HAS BEEN PROVIDED BY THIS DEVELOPMENT, SUCH THAT SURFACE WATER FROM THE DEVELOPMENT WILL NOT BE DIVERTED ONTO AND CAUSE DAMAGE TO ADJACENT PROPERTY FOR STORMS UP TO AND INCLUDING THE ONE HUNDRED (100) YEAR EVENT, AND THAT THE DESIGN PLANS ARE IN COMPLIANCE WITH ALL FEDERAL, STATE, COUNTY, AND CITY LAWS AND ORDINANCES.

## NOTES.

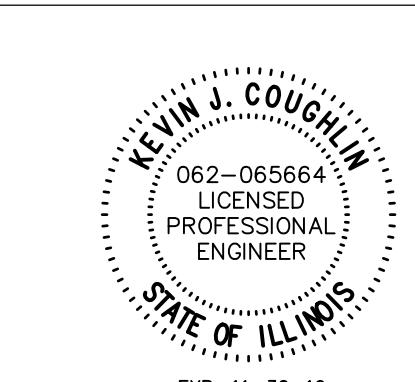
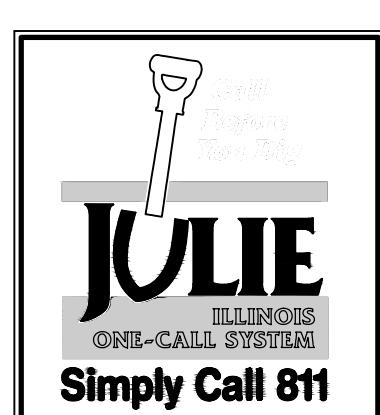
- 1. THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY ZARKO SEKEREZ AND ASSOCIATES, INC. ON APRIL 9, 2019. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY MANHARD CONSULTING AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS

## BENCHMARKS:

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SITE BENCHMARK IS RIM OF MANHOLE IN SIBLEY BOULEVARD AT APPROXIMATE MIDPOINT OF LOT 2. ELEVATION = 606.34

<u>UTILITY CONTACTS</u>	
<u>ELECTRIC</u> COMED 4401 W 135TH STREET CRESTWOOD, IL. 60445 (800) 334-7661	<u>WATER</u> VILLAGE OF DOLTON 401 E 144TH STREET DOLTON, IL. 60419 (708) 201-3280 CONTACT: MATHEW STACEY
<u>GAS</u> NICOR 19199 GLENWOOD ROAD GLENWOOD, IL. 60507 (888) 642-6748	<u>TELEPHONE</u> AT&T 236 E 159TH STREET HARVEY, IL. 60426 (708) 222-2222
<u>STORM SEWER</u> VILLAGE OF DOLTON 401 E 144TH STREET DOLTON, IL. 60419 (708) 201-3280 CONTACT: MATHEW STACEY	<u>SANITARY SEWER</u> MWRDGC - CALUMET WRP 100 E ERIN STREET CHICAGO, IL. 60611 (773) 266-3538





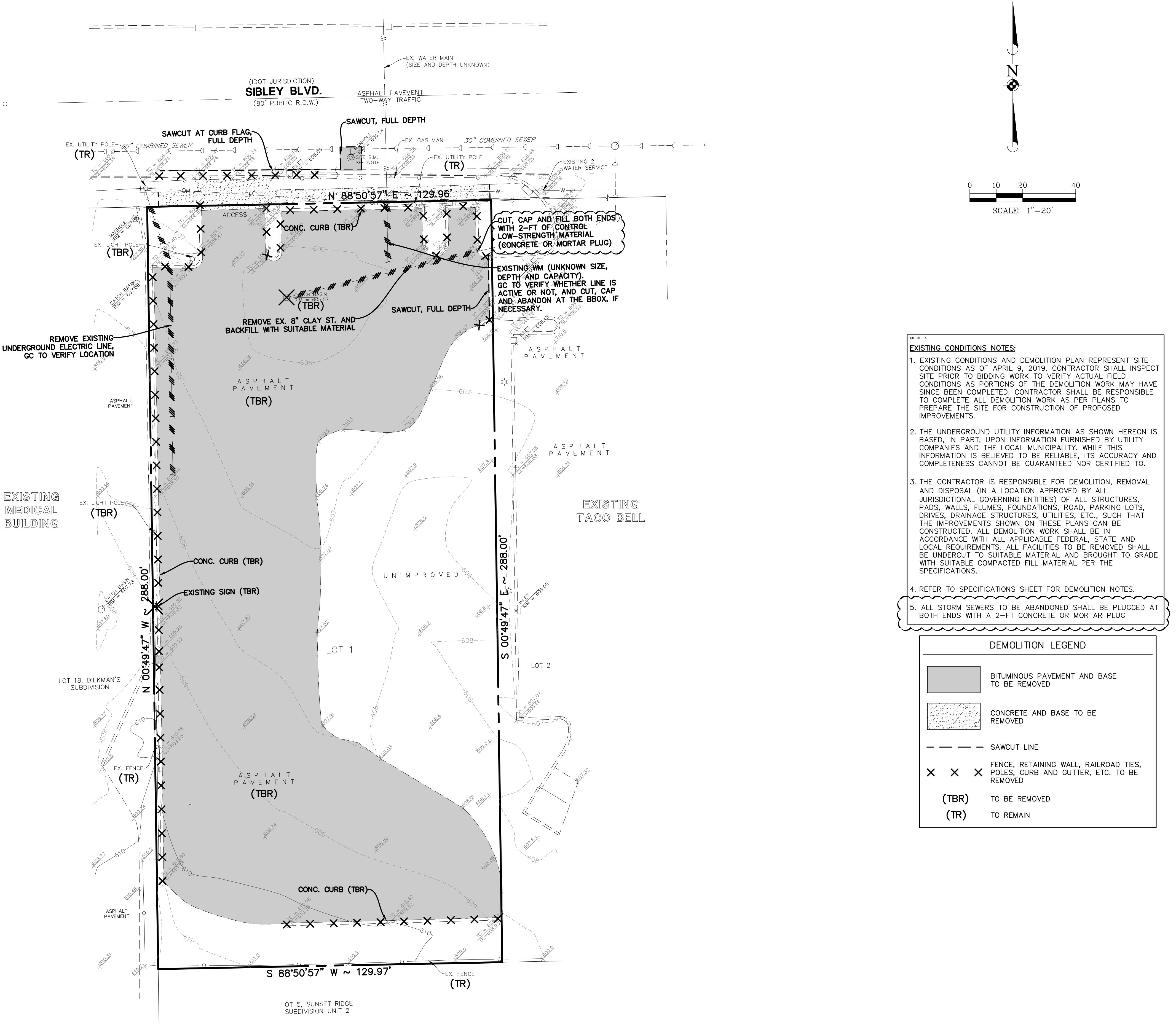
DRAWN BY	JRC
REVISIONS	
DATE	08-05-19
SCALE	1"=20'
SHEET	3 OF 13



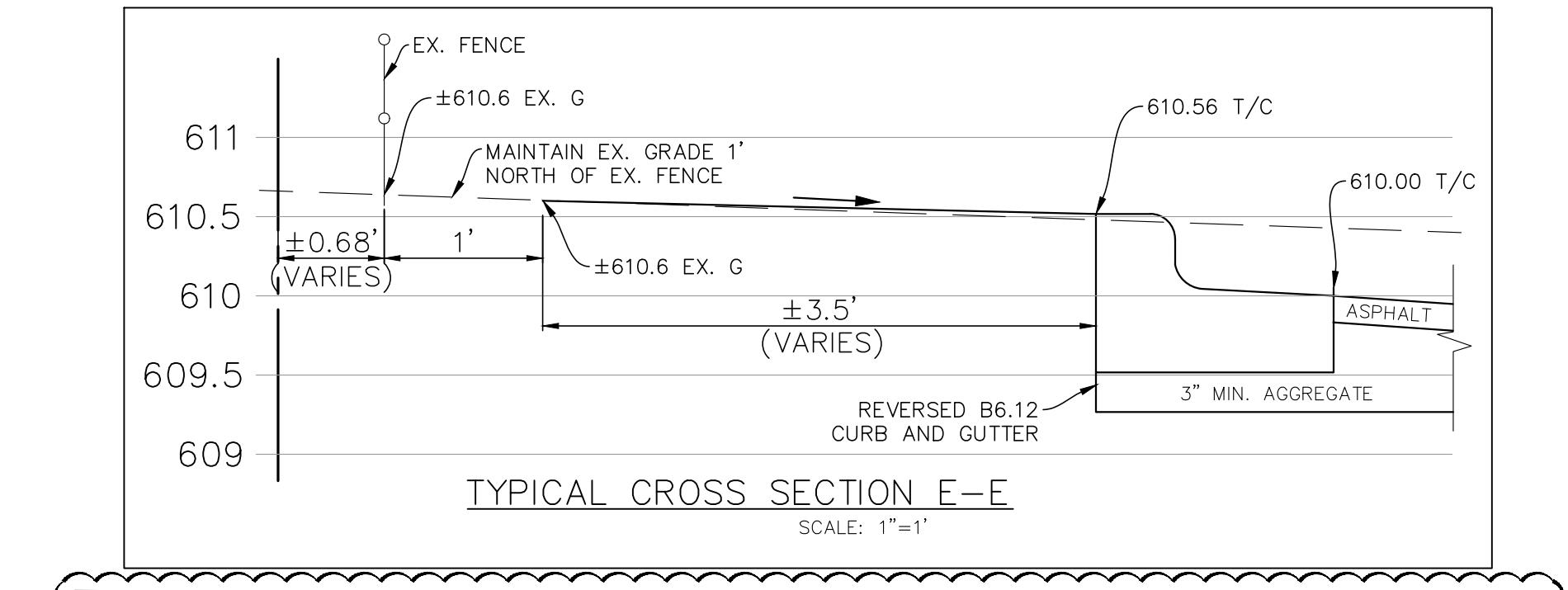
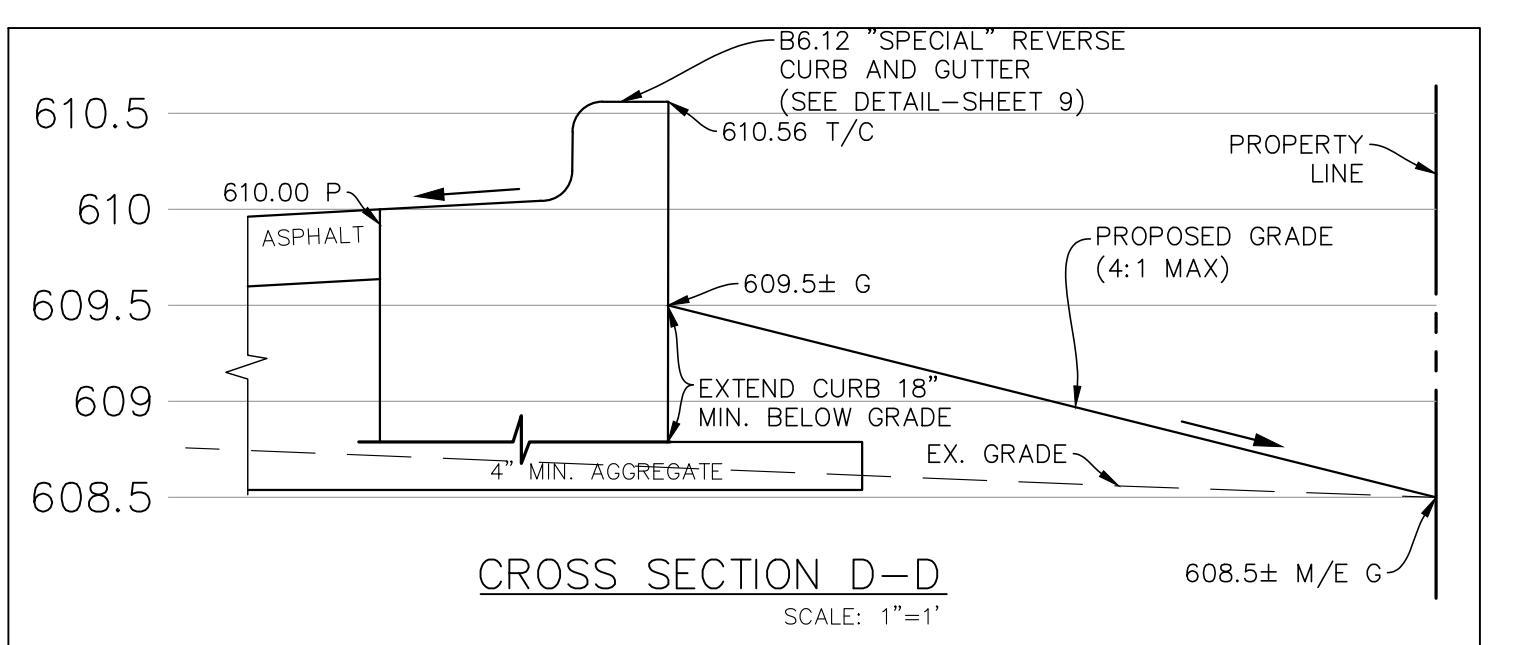
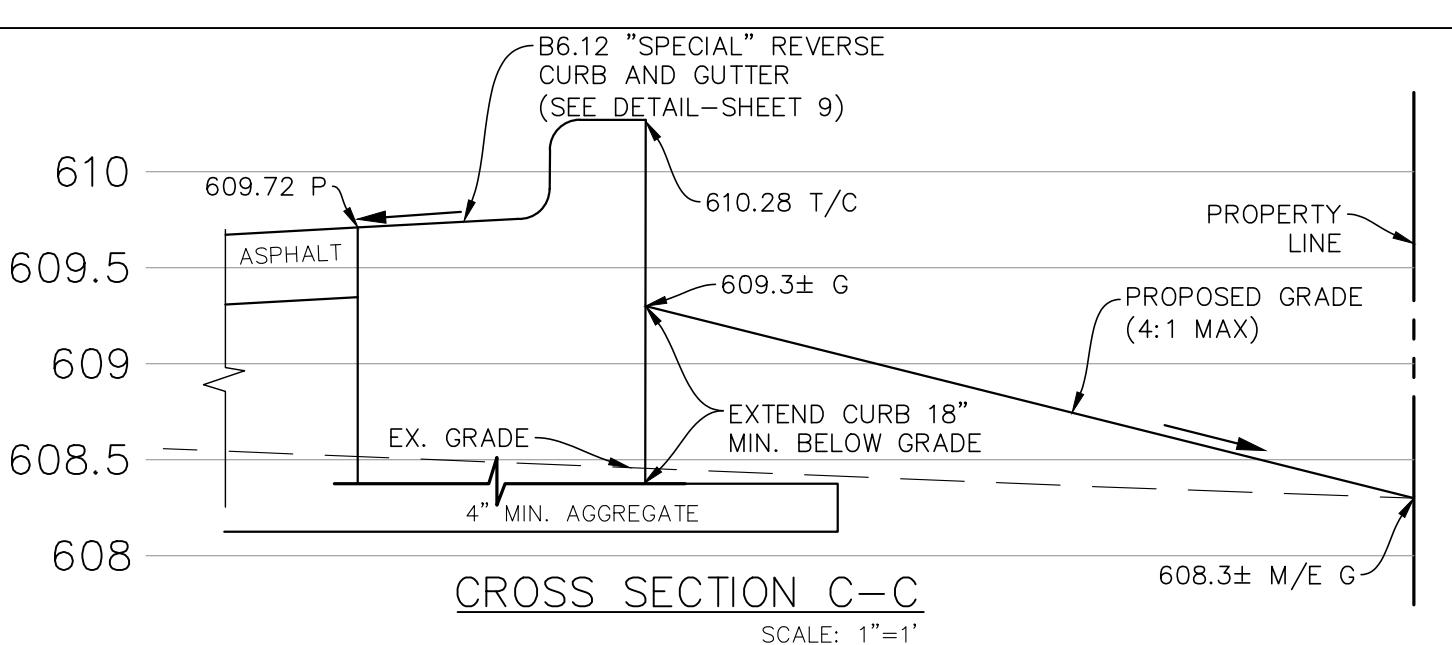
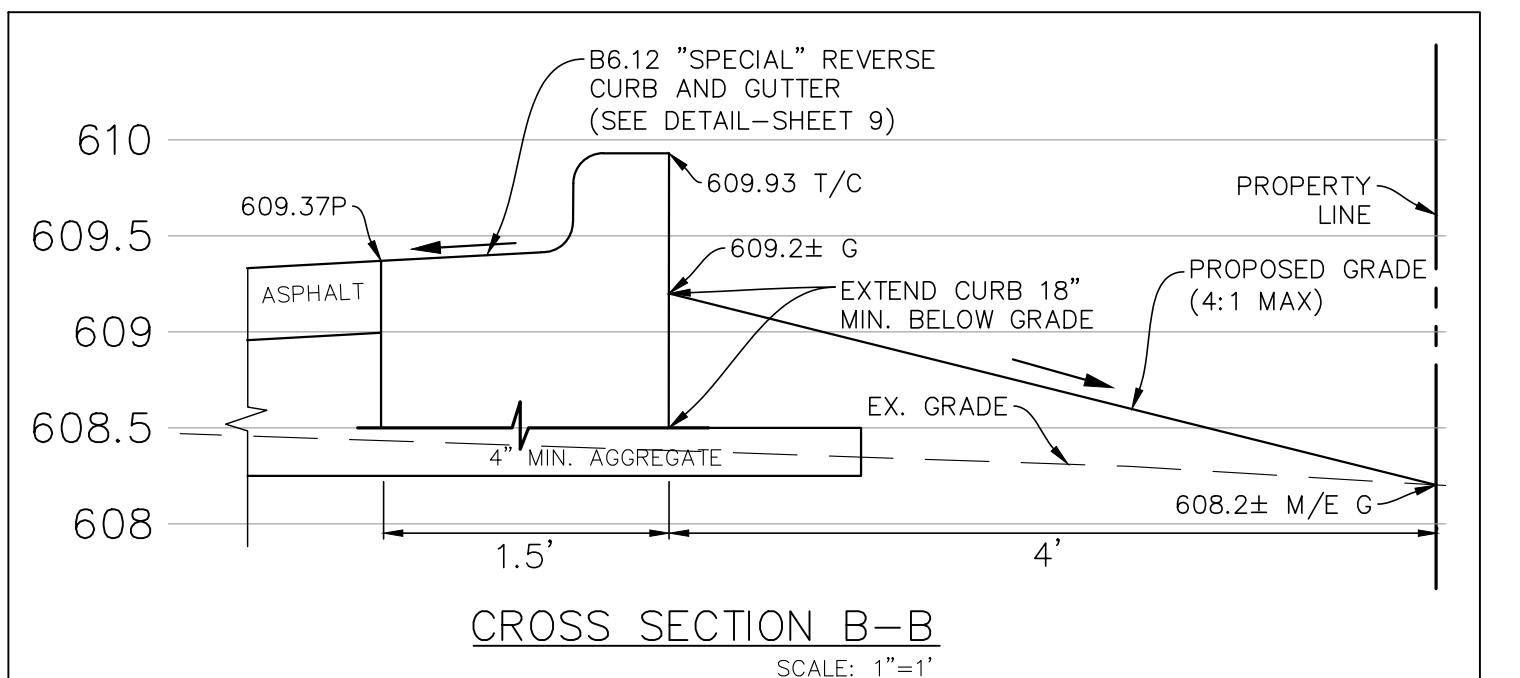
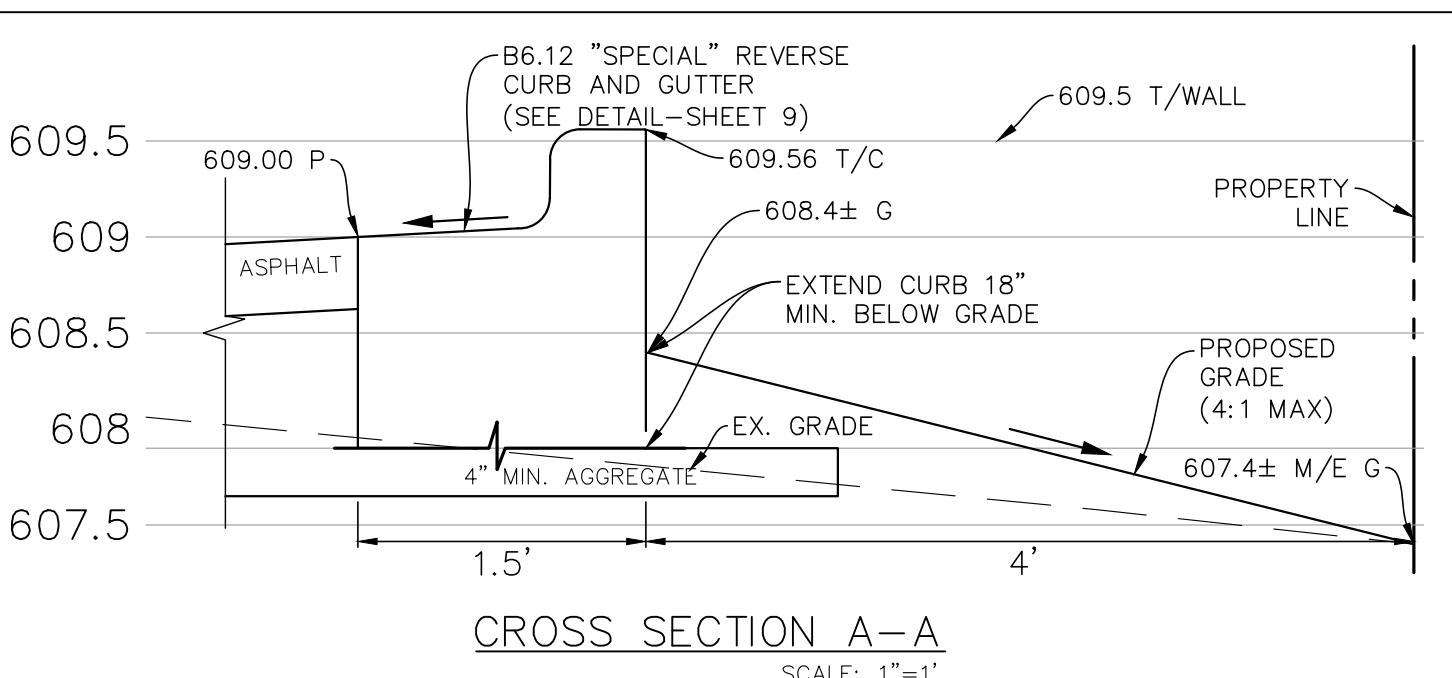
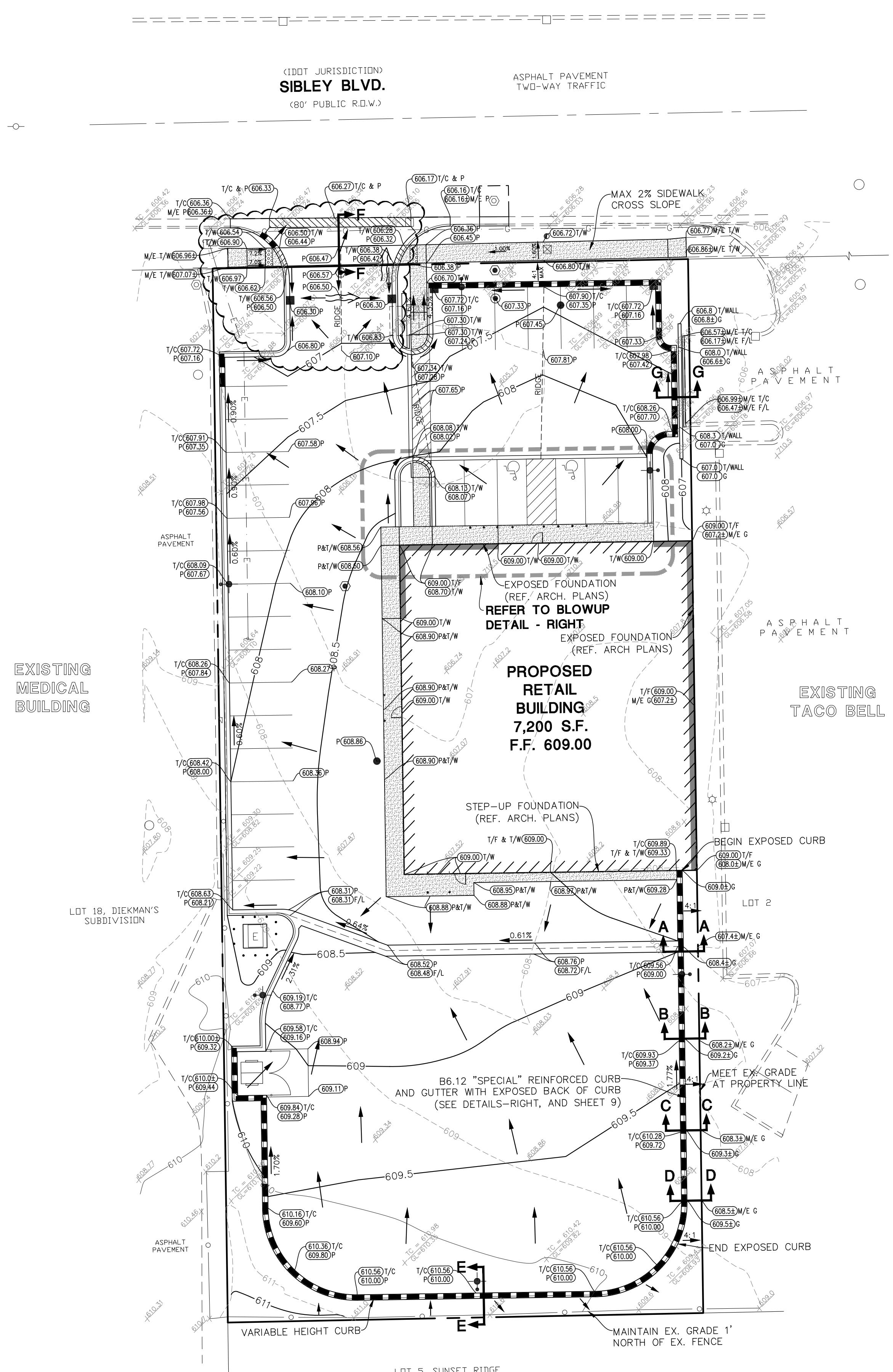
## PROPOSED RETAIL DEVELOPMENT

## VILLAGE OF DOLTON, ILLINOIS

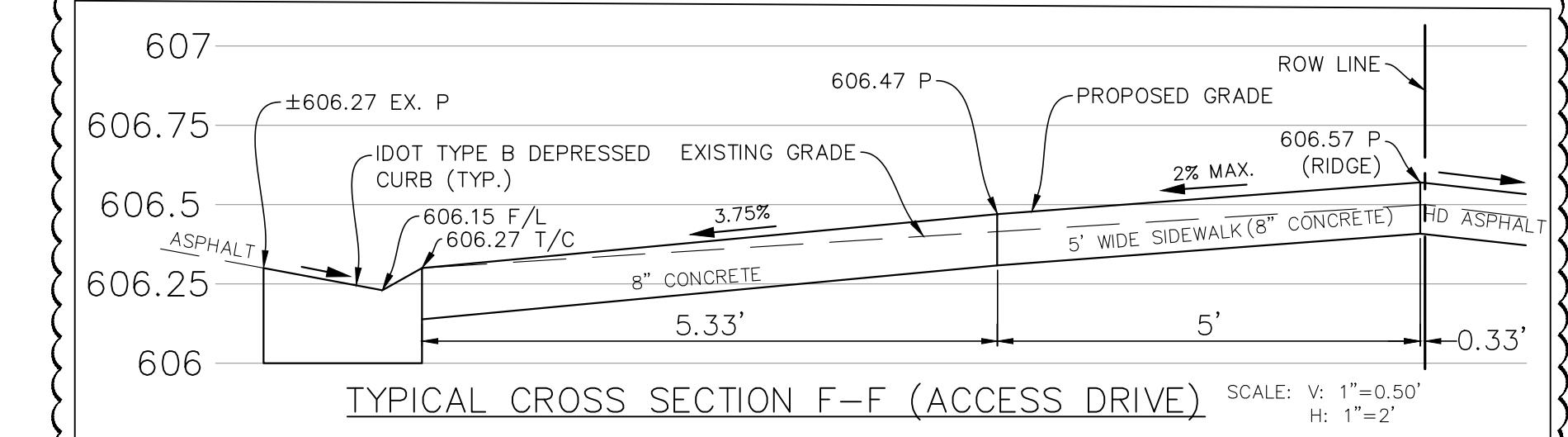
## EXISTING CONDITIONS AND DEMOLITION PLAN



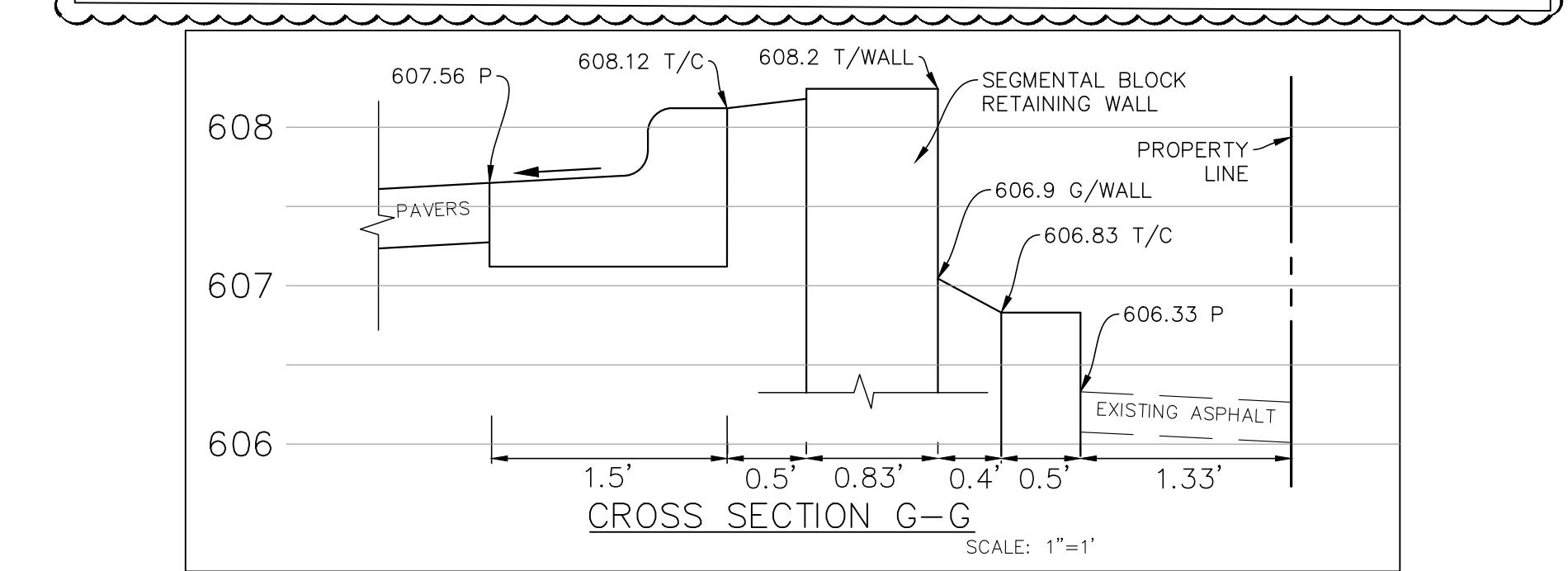




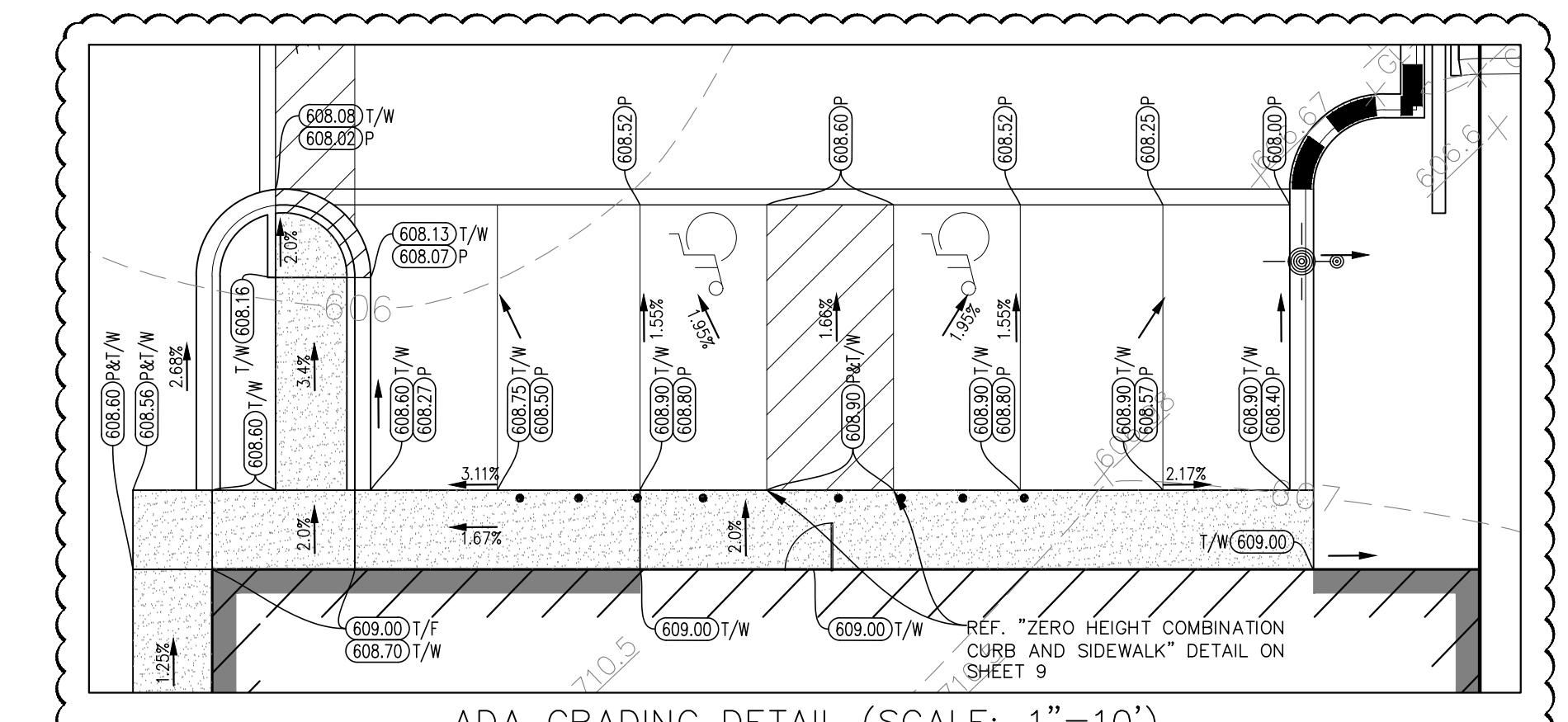
### TYPICAL CROSS SECTION E-E



#### TYPICAL CROSS SECTION E-E (ACCESS DRILLING)



## CROSS SECTION G

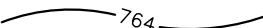
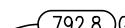


ADA GRADING DETAIL (SCALE: 1"=10')

06-01-16

**GRADING NOTES:**

1. RETAINING WALL DESIGN TO BE PROVIDED BY OTHERS.
2. PAVEMENT SLOPES THROUGH HANDICAP ACCESSIBLE PARKING AREAS SHALL BE 2.00% MAXIMUM IN ANY DIRECTION.
3. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% OR LESS.
4. MEET EXISTING GRADE AT PROPERTY LIMITS UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
6. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
9. ALL UNPAVED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 6 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
10. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY ZARKO SEKEREZ AND ASSOCIATES, INC. ON APRIL 9, 2019. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
11. TRANSITIONS FROM DEPRESSED CURB TO FULL HEIGHT CURB SHALL BE TAPERED AT 2H:1V UNLESS OTHERWISE NOTED.

GRADING PLAN LEGEND	
 764	PROPOSED 1 FOOT CONTOURS
 792.8 G	PROPOSED SPOT ELEVATION
F.F.	PROPOSED FINISHED FLOOR ELEVATION
G/F	PROPOSED GRADE AT FOUNDATION
P	PROPOSED PAVEMENT ELEVATION
T/C	PROPOSED TOP OF CURB
T/W	PROPOSED TOP OF WALK
T/WALL	PROPOSED TOP OF WALL
M/E	MEET EXISTING
G	PROPOSED GROUND GRADE OR GROUND AT BASE OF RETAINING WALL
P & T/W	PAVEMENT FLUSH WITH SIDEWALK GRADE
 T/F	PROPOSED TOP OF FOUNDATION
	PROPOSED DITCH OR SWALE
	PROPOSED DIRECTION OF FLOW
	OVERFLOW RELIEF SWALE
 RIDGE	PROPOSED RIDGE LINE
 (0.5')	PROPOSED DEPTH OF PONDING
	RETAINING WALL
(L)	PROPOSED SWALE LOW POINT
(S)	PROPOSED SWALE SUMMIT

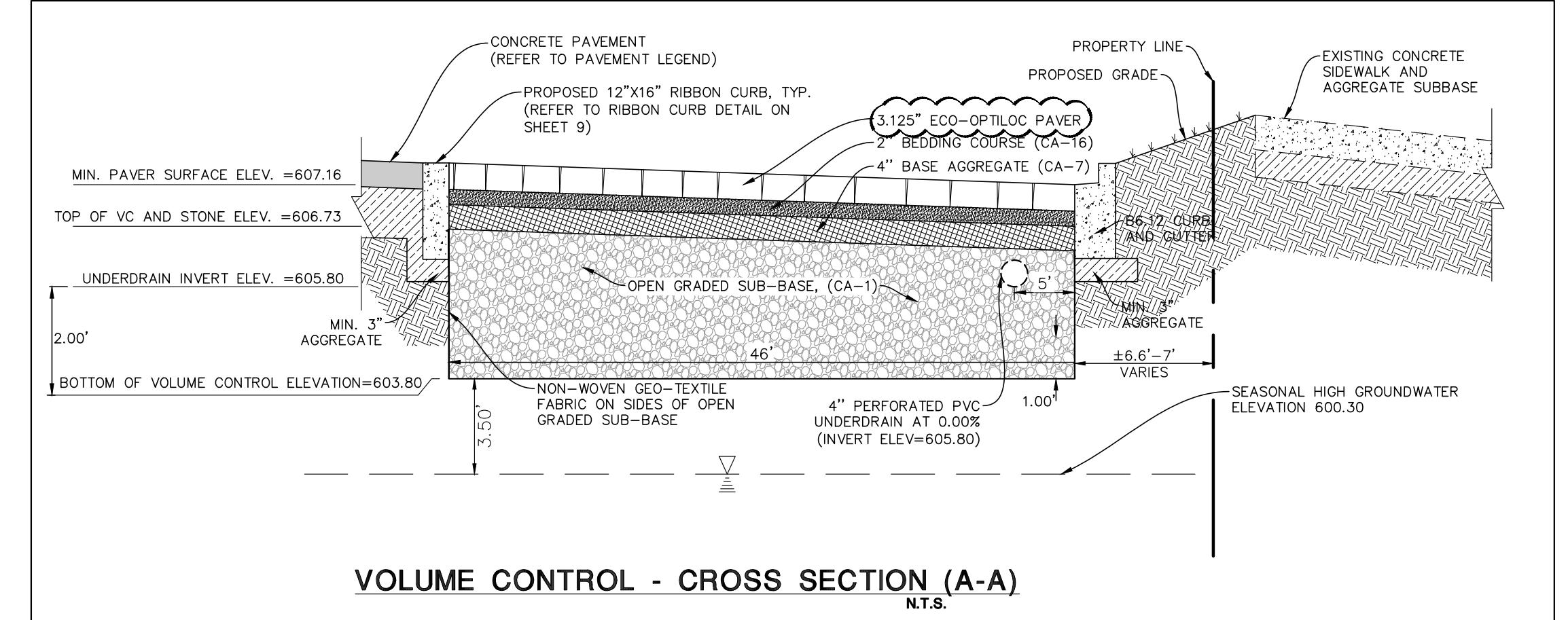
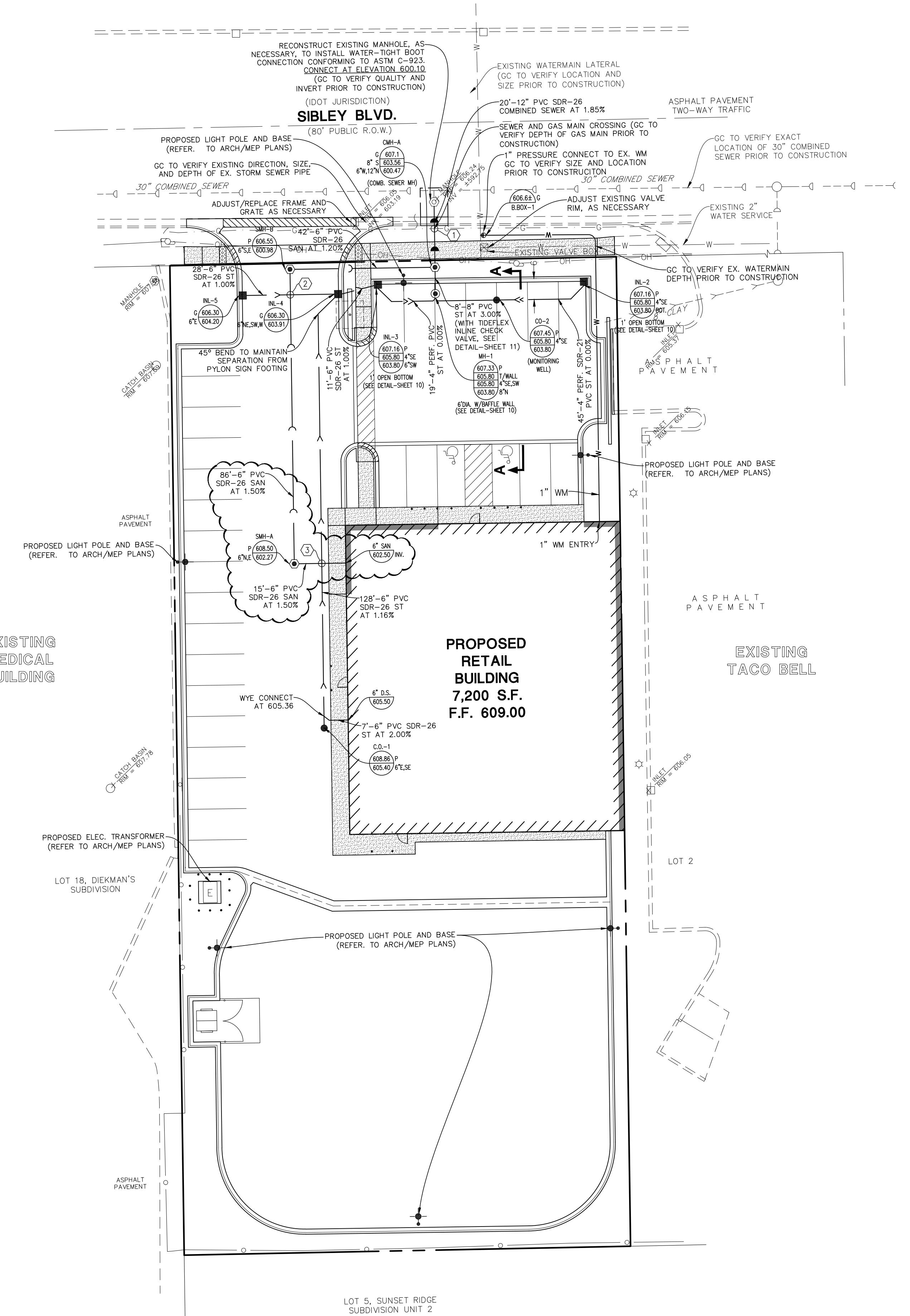
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REVISIONS  
DATE  
PER ARCHITECTURE  
PER MECHANICAL  
PER ELECTRICAL  
PER PLANTING  
PER VILLAGE REVIEW  
JRC  
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## PROPOSED RETAIL DEVELOPMENT

### VILLAGE OF DOLTON, ILLINOIS

#### UTILITY PLAN

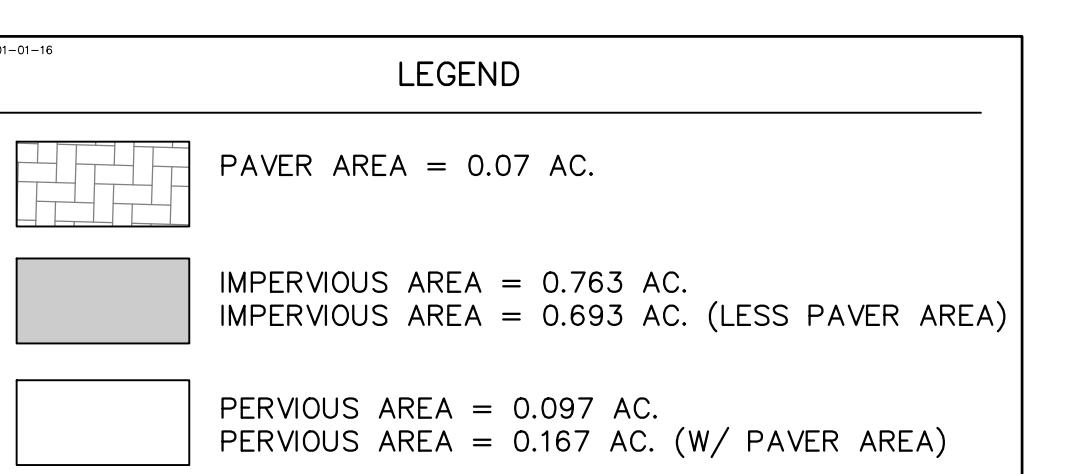
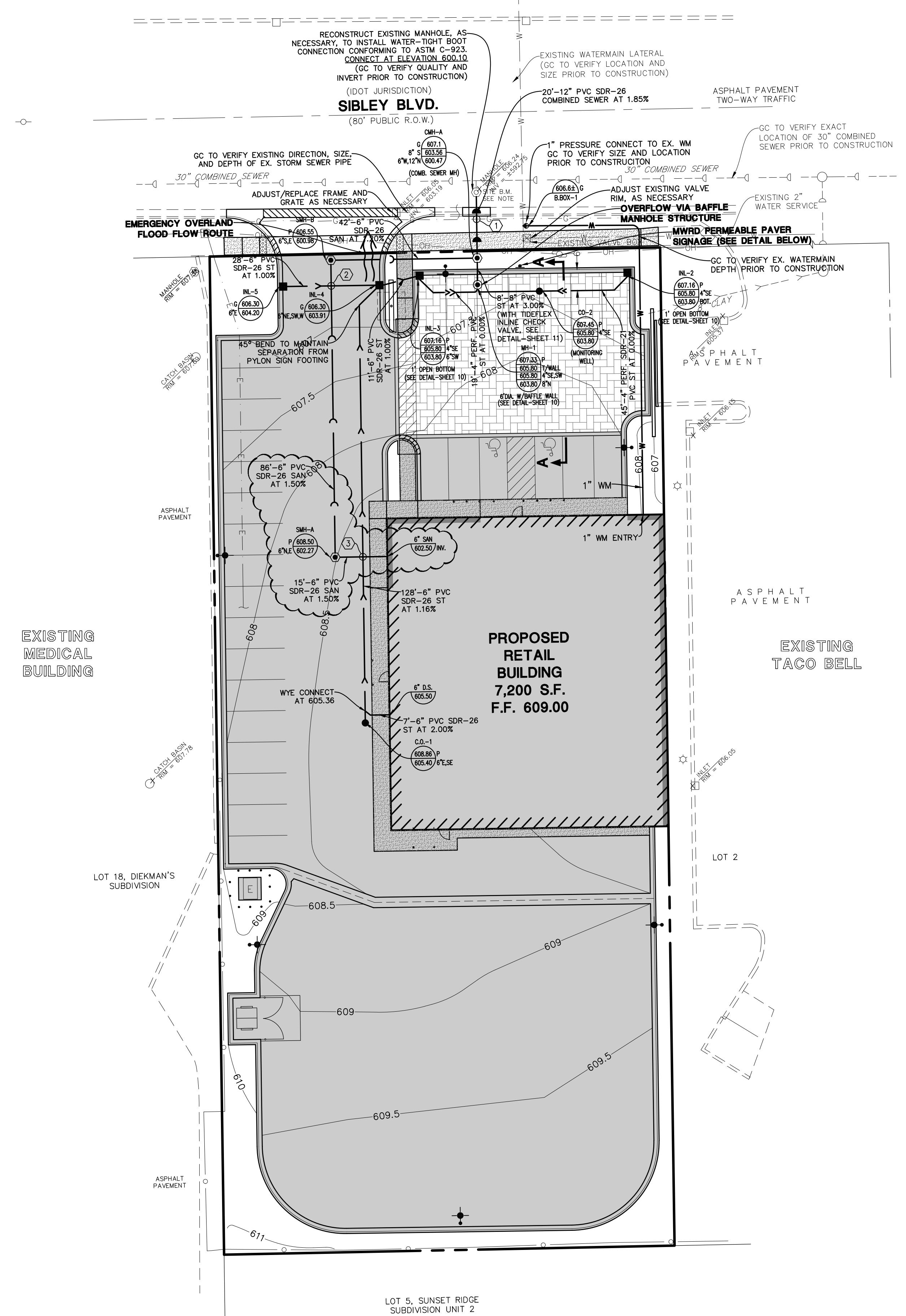


VOLUME CONTROL - CROSS SECTION (A-A)  
N.T.S.

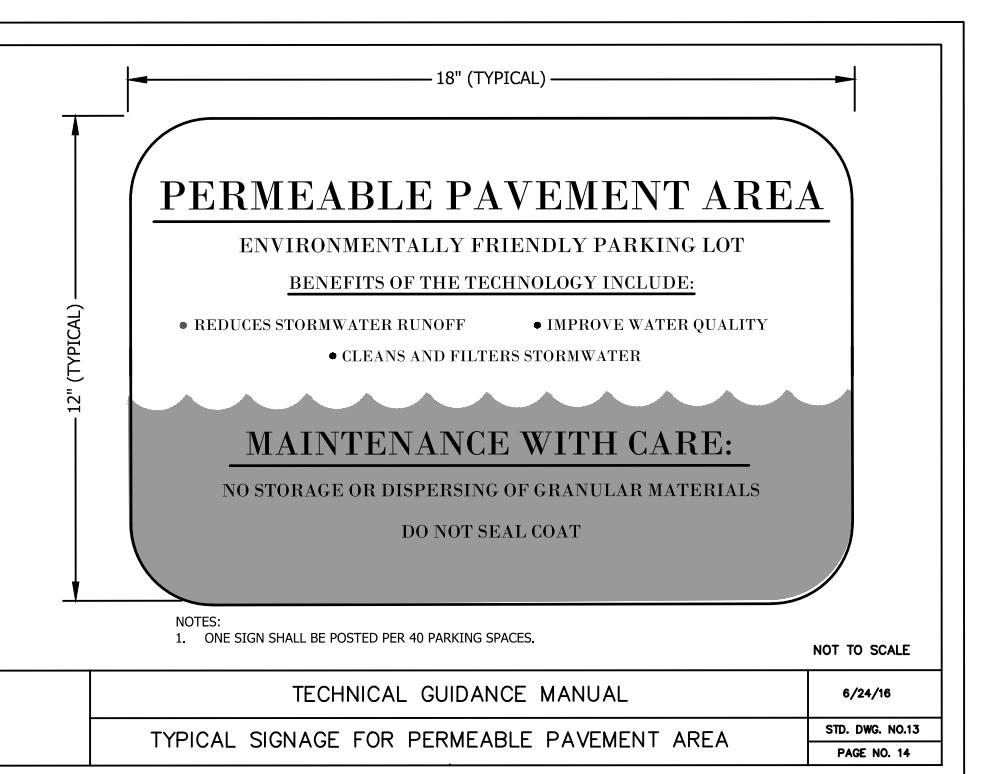
- 06-01-16  
**UTILITY NOTES:**
- ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
  - BUILDING DIMENSIONS AND ADJACENT UTILITY LAYOUT HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE, CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
  - THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
  - ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
  - CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRIP UTILITY LOCATIONS, SIZES, CONDITIONS, ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
  - LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND DETAILS.
  - THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
  - CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
  - AT LOCATIONS WHERE WATER MAIN CROSSES BENEATH OR LESS THAN 18" ABOVE A SEWER, PROVIDE WATER MAIN PROTECTION PER STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
  - ELEVATIONS GIVEN FOR STORM SEWER STRUCTURES LOCATED IN CURB LINE ARE PAVEMENT ELEVATIONS.
  - ALL WATER MAIN SHALL BE 5'-6" BELOW FINISHED GRADE TO TOP OF MAINS UNLESS NOTED OTHERWISE.
  - ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
  - THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
  - ALL SANITARY AND STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
  - PROVIDE CONCRETE COLLAR FOR ALL DRAINAGE STRUCTURES IN PAVEMENT, NOT ADJACENT TO CURB. SEE CONCRETE COLLAR DETAIL ON DETAIL SHEET.
  - CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO EXISTING SANITARY MANHOLES.
  - EXTERNAL CHIMNEY SEALS ARE REQUIRED ON PROPOSED AND ADJUSTED EXISTING SANITARY MANHOLES.
  - SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
  - ALL D.I. WATERMAIN FITTINGS SHALL BE WRAPPED.

STORM MANHOLE TABLE			
MANHOLE LABEL	SIZE (IN.)	TYPE	FRAME AND GRATE
MH-1	72"	PRECAST CONCRETE OUTLET CONTROL STRUCTURE WITH BAFFLE WALL (PER DETAIL - SHEET 10)	(2) NEENAH R-1772 CLOSED LID
INL-2	24"	PRECAST CONCRETE W/ 1' DIA. OPEN BOTTOM	NEENAH R-2502-C
INL-3	24"	PRECAST CONCRETE W/ 1' DIA. OPEN BOTTOM	NEENAH R-2502-C
INL-4	24"	PRECAST CONCRETE	NEENAH R-2502-C
INL-5	24"	PRECAST CONCRETE	NEENAH R-2502-C

- REFER TO SHEET 12-CONSTRUCTION DETAILS FOR NYOPLAST CONSTRUCTION DETAILS AND SPECIFICATIONS.
- CLEANOUTS IN PAVEMENT SHALL HAVE PANELLA-TYPE HEAVY DUTY LID



VOLUME CONTROL REQUIREMENT	
SITE AREA	0.86 ACRES
SITE IMPERVIOUS AREA	0.693 ACRES
VOL CONTROL REQUIRED	$\begin{aligned} &= (0.693) * (0.083) \\ &= 0.0575 \text{ AC-FT} \\ &= 2,504.44 \text{ CF} \end{aligned}$
VOL CONTROL PROVIDED	= 2,716.33 CF



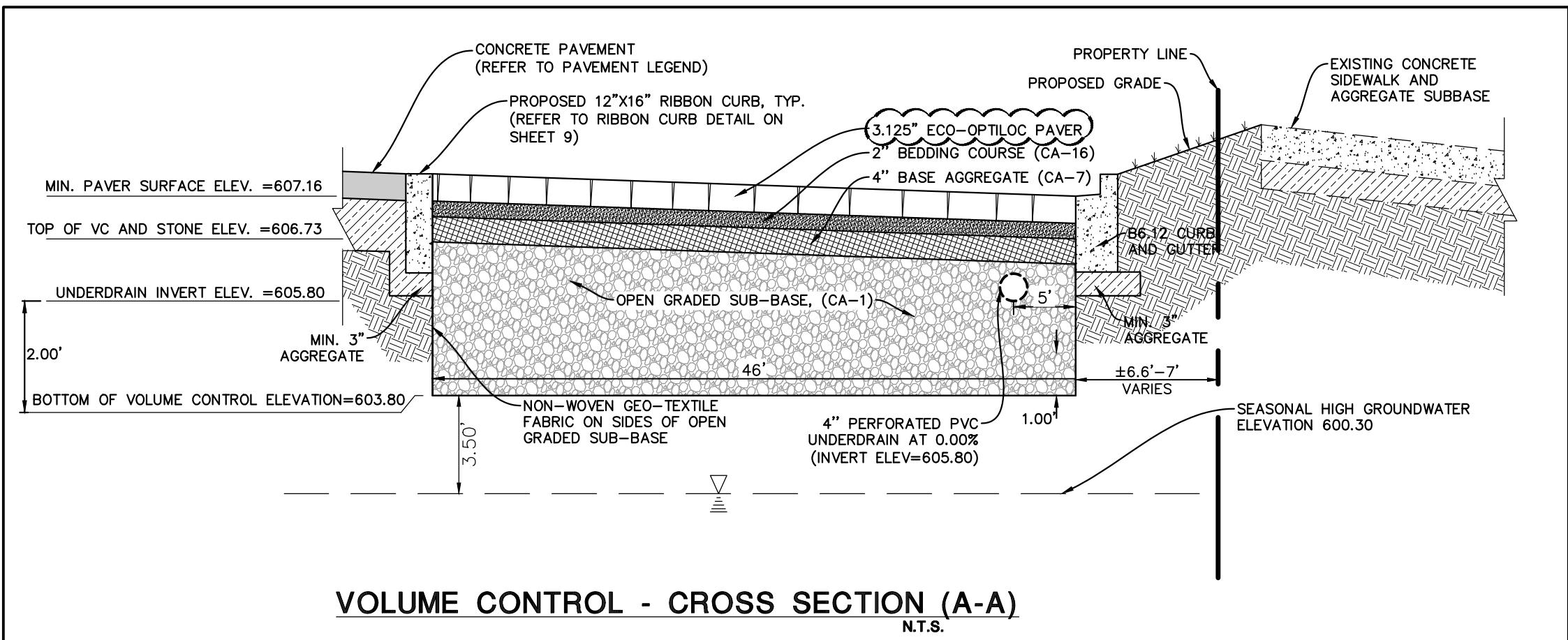
# MAINTENANCE SUMMARY

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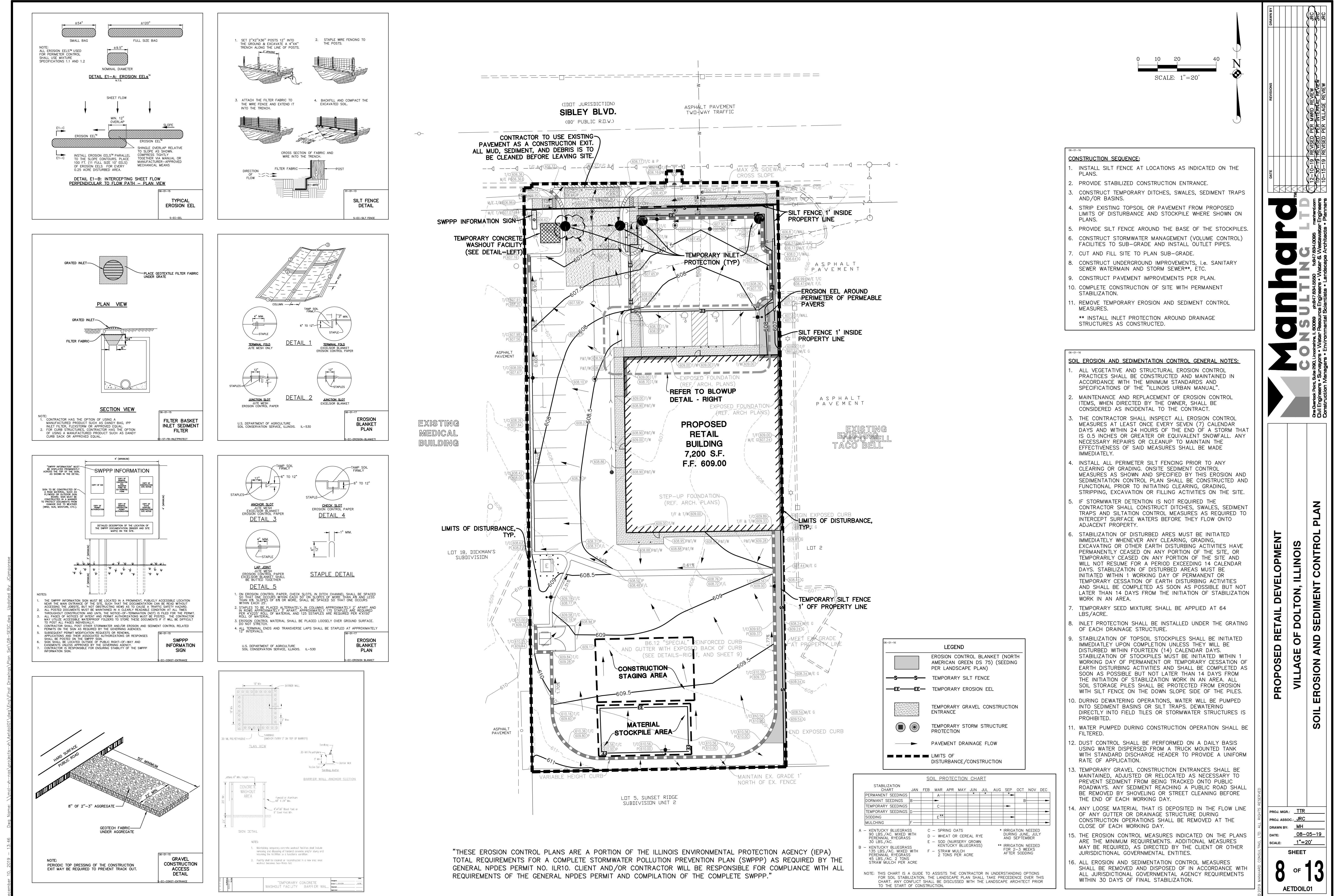
## **PROPOSED RETAIL DEVELOPMENT**

## GE OF DOLTON, ILLINOIS

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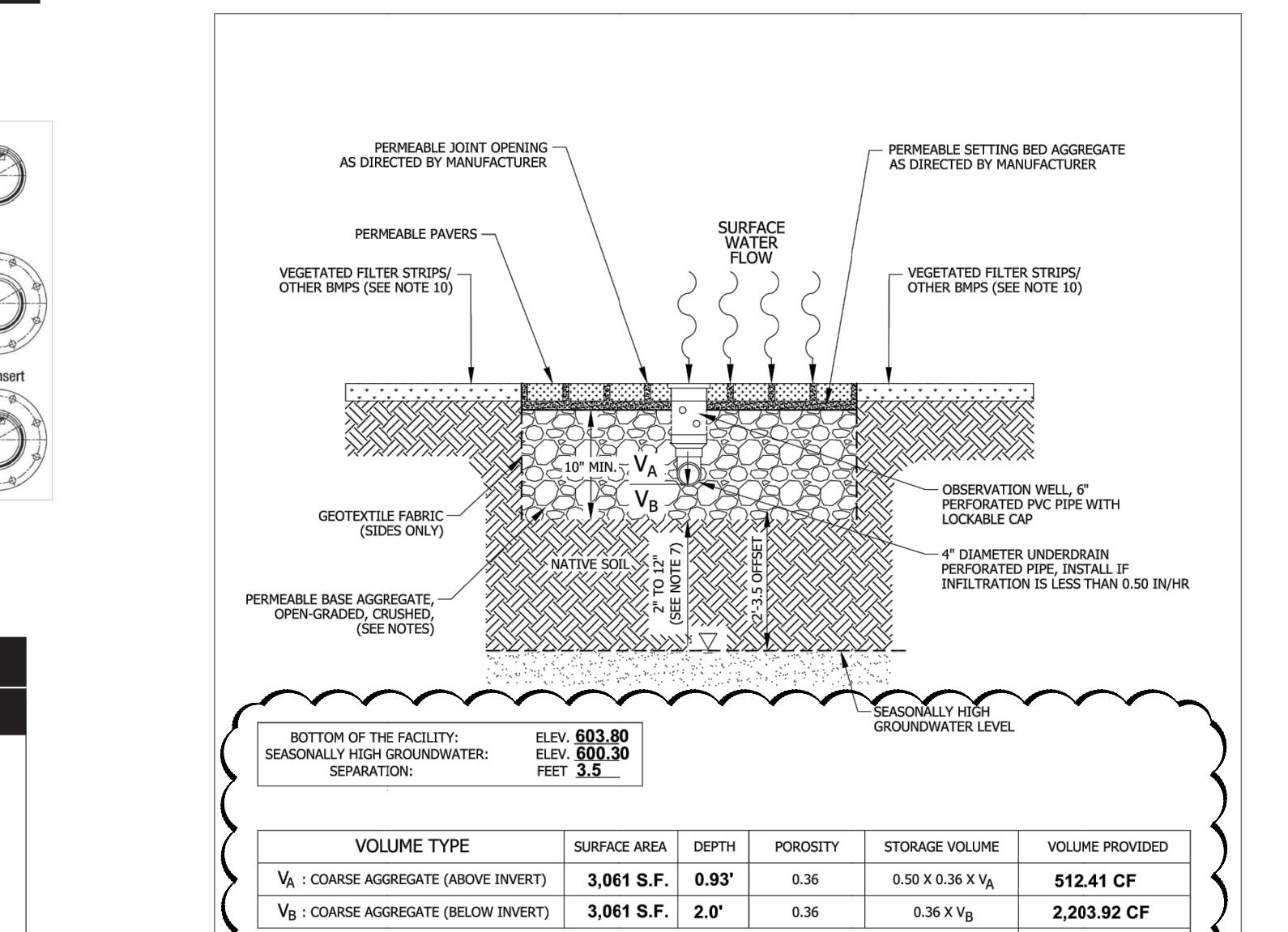
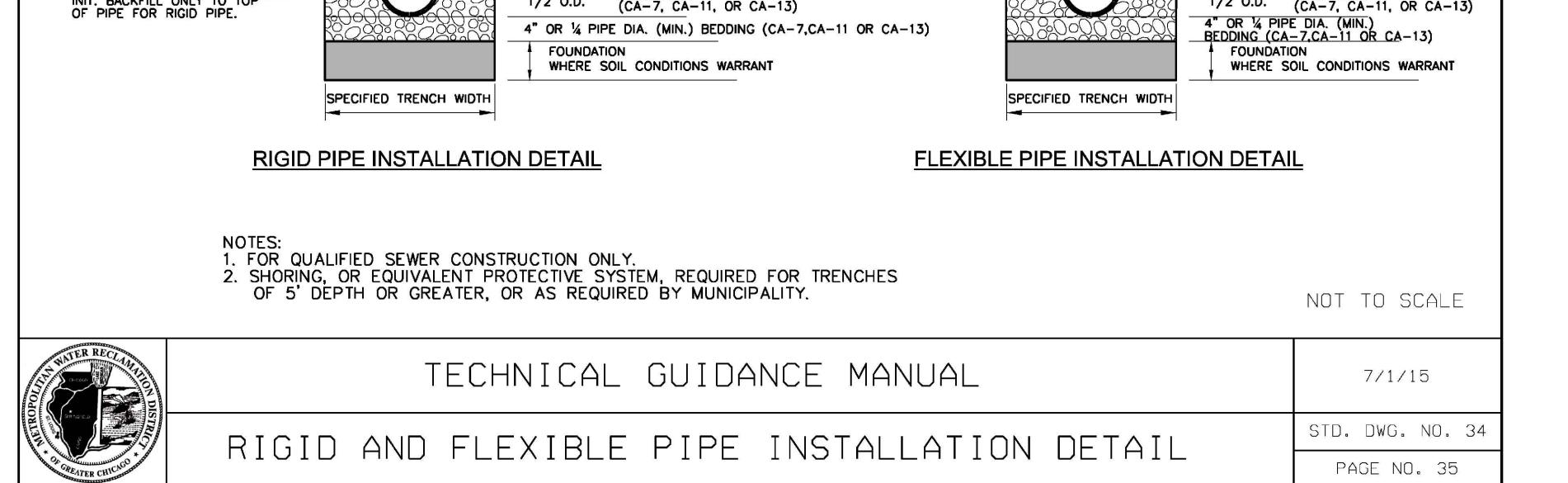
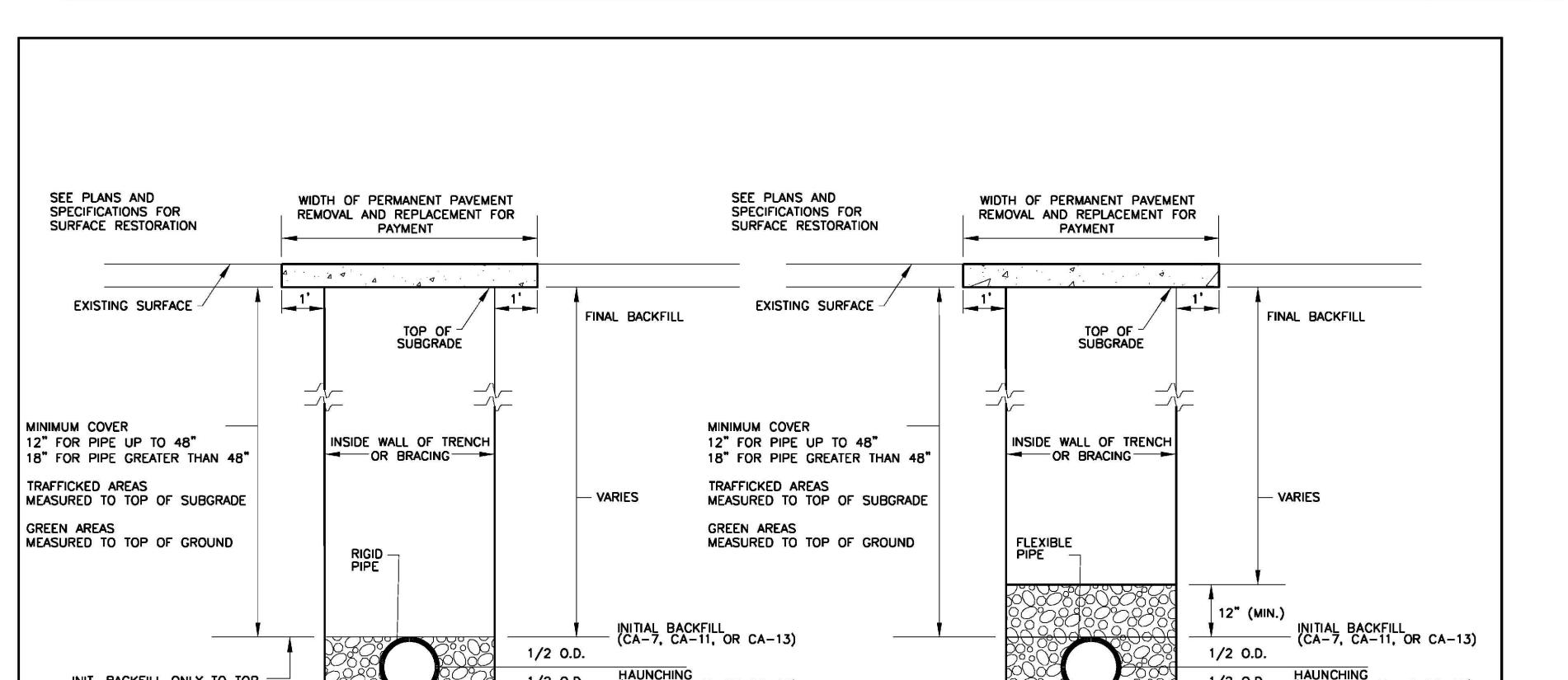
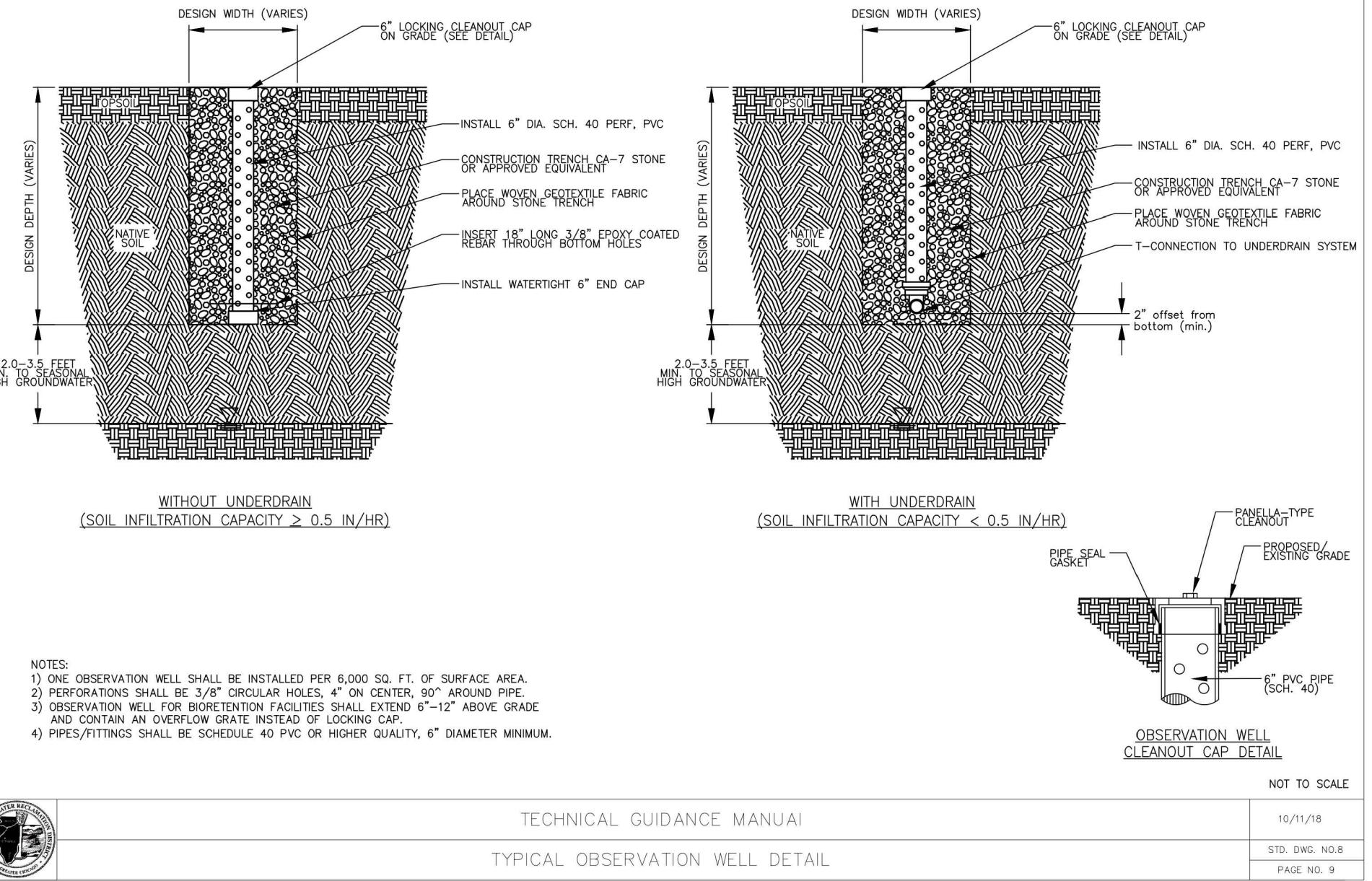
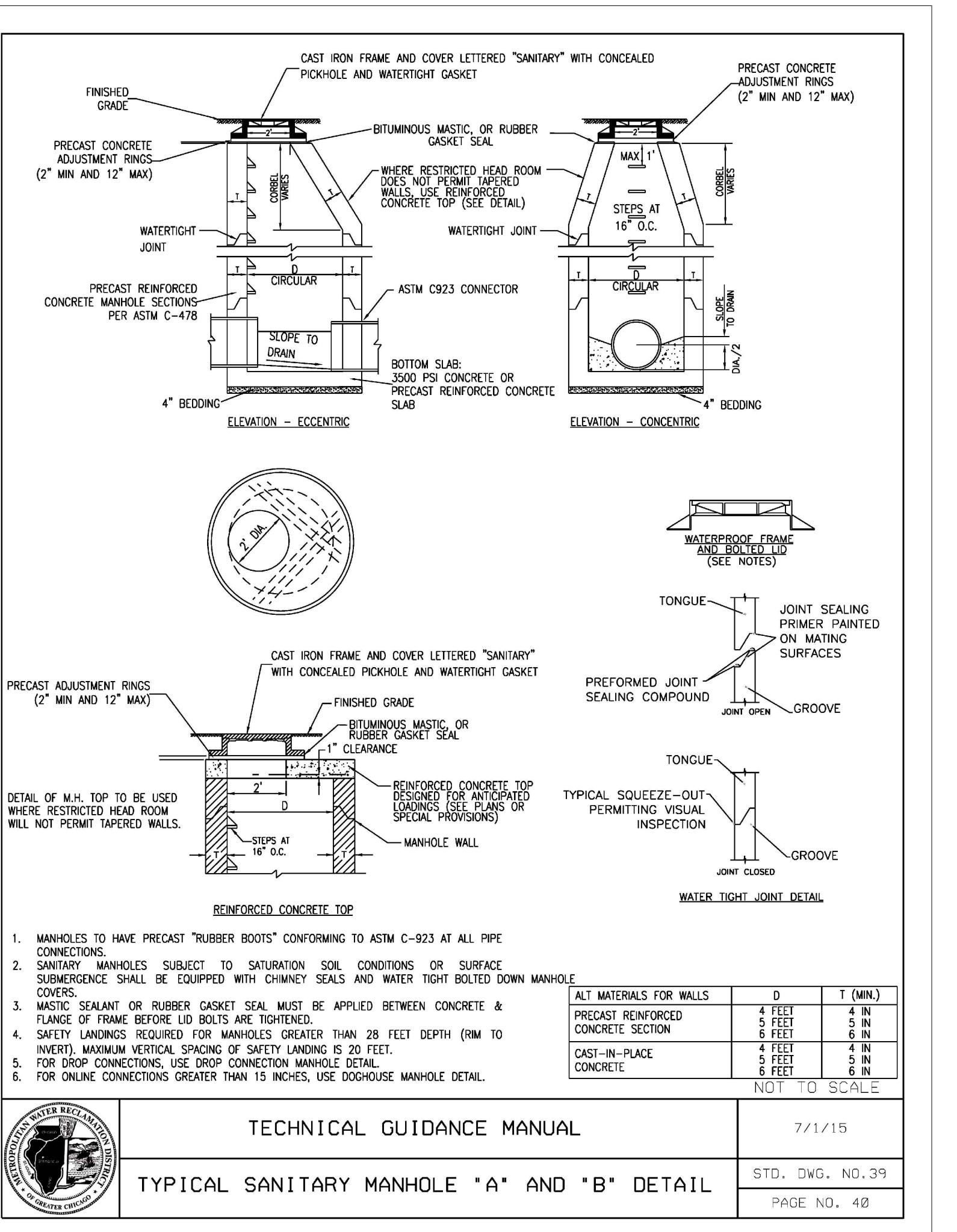
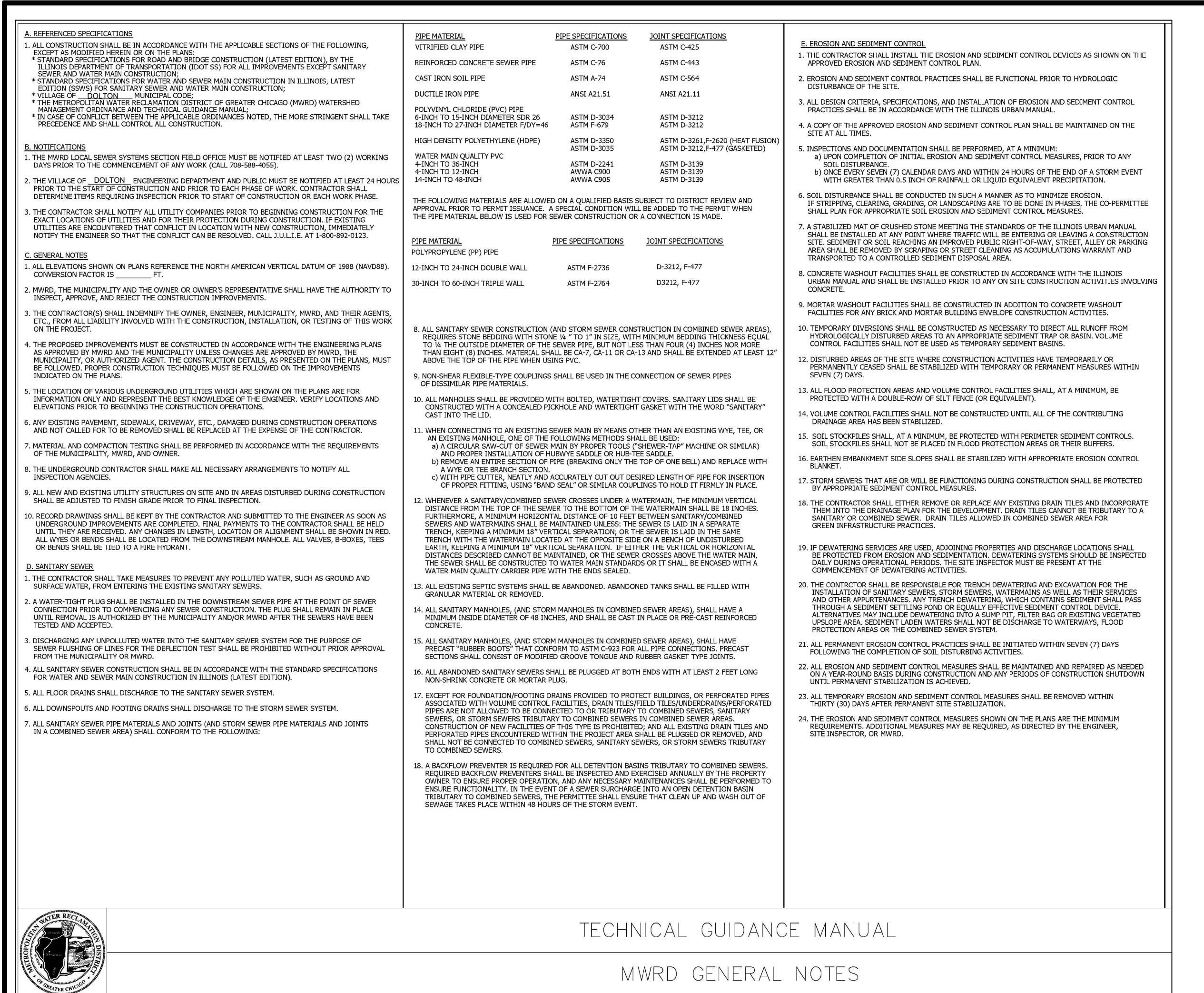


DATE	REVISIONS	DRAWN BY
1-17-20	REVISED PER ARCH. COORDINATION	JRC
12-10-19	REVISED PER MWARD REVIEW	JRC
10-30-19	REVISED PER INTERNAL REVIEW	JRC
10-15-19	REVISED PER VILLAGE REVIEW	JRC









## VILLAGE OF DOLTON, ILLINOIS

## CONSTRUCTION DETAILS

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1 OF  
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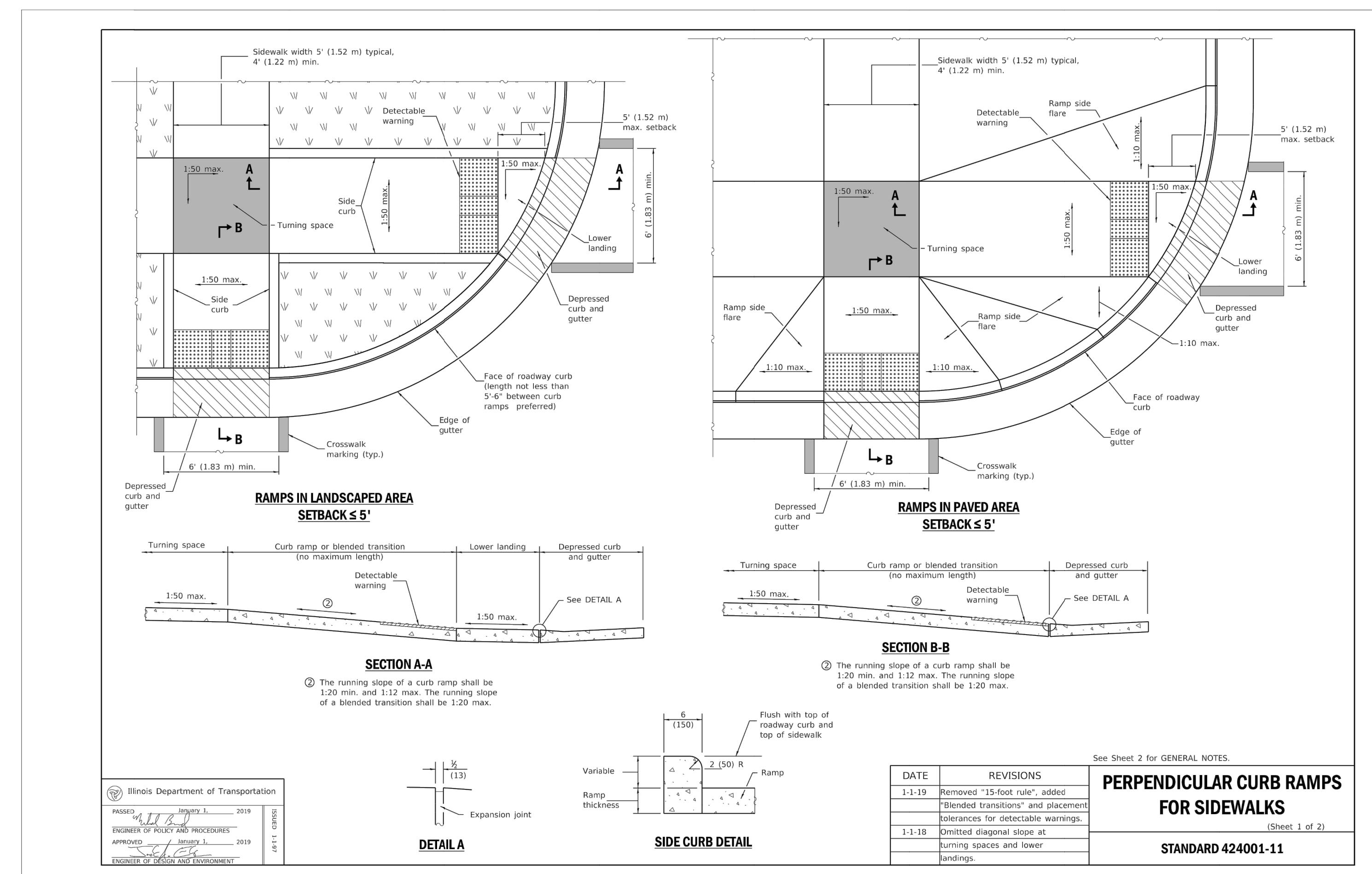
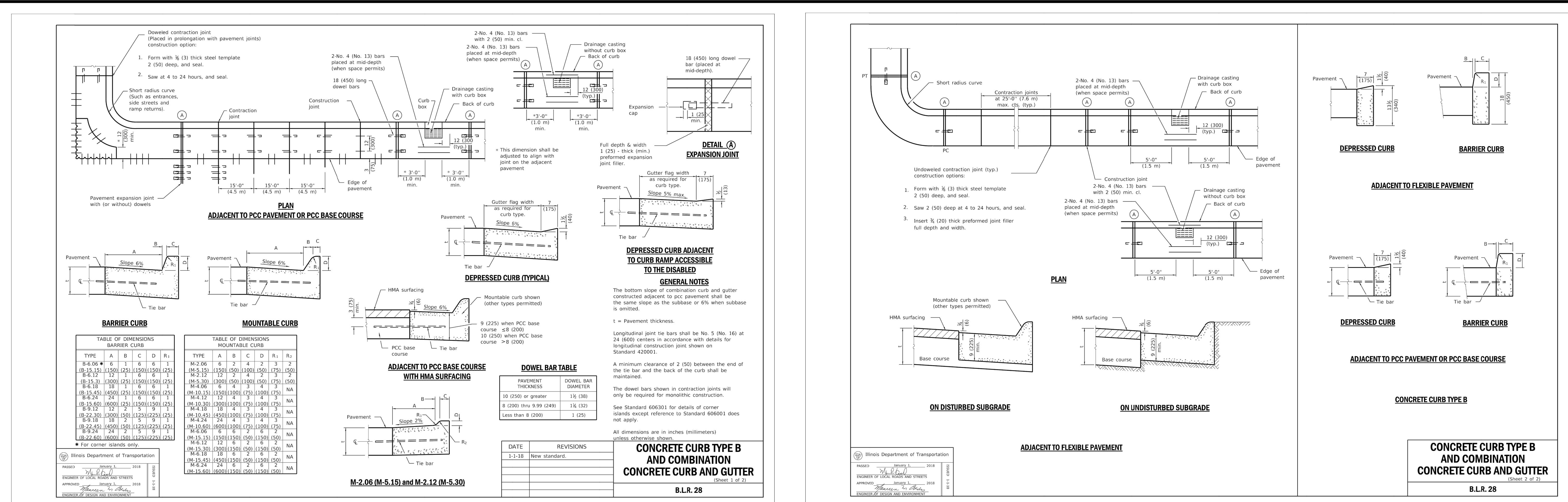
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## MANHARD CONSULTING, LTD. STANDARD SPECIFICATIONS

### GENERAL CONDITIONS

- CONTRACTOR acknowledges and agrees that the use and reliance of these Plans and Specifications is sufficient consideration for CONTRACTOR's covenants stated herein.
- TERMS OF CONTRACT**
- a. "CLIENT" shall mean AETNA DEVELOPMENT CORP., which is the person or entity with whom Manhard Consulting, Ltd. has contracted with to prepare Civil Engineering PLANS and SPECIFICATIONS.
  - b. "ENGINEER" shall mean Manhard Consulting, Ltd., a Civil Engineering consultant on the subject project.
  - c. "PPC" or "SPECIFICATIONS" shall mean the Civil Engineering PLANS and SPECIFICATIONS prepared by the ENGINEER, which may be a part of the contract documents for the subject project.
  - d. "CONTRACTOR" shall mean any person or entity performing any work described in the PLANS and SPECIFICATIONS.
  - e. "JURISDICTIONAL GOVERNING ENTITY" shall mean any municipal, county, state or federal unit of government from whom an approval, permit and/or review is required for any aspect of the subject project.

### INTENT OF THE PLANS AND SPECIFICATIONS

The intent of the PLANS and SPECIFICATIONS is to set forth certain requirements of performance, type of equipment and structures, and standards of materials and construction. They may also identify labor and materials, equipment and transportation necessary for the proper execution of the work but are not intended to be infinitely determinate so as to include minor items usually required as part of the work. The PLANS and SPECIFICATIONS require new material and equipment unless otherwise indicated, and to require complete performance of the work in spite of omissions of specific references to any minor component parts. It is the intent of the CONTRACTOR that materials or work not covered by or properly inferred from any heading, branch, class or trade of the SPECIFICATIONS shall be supplied under subcontracted work. Materials or work described in words, which so applied have a well-known technical or trade meaning, shall be referred to such recognized standards.

### INTERPRETATION OF PLANS AND SPECIFICATIONS

- a. The CLIENT and/or CONTRACTOR shall promptly report any errors or ambiguities in the PLANS and SPECIFICATIONS to the ENGINEER. Questions as to meaning of PLANS and SPECIFICATIONS shall be interpreted by the ENGINEER, whose decision shall be final and binding on all parties concerned.
- b. The ENGINEER will provide the CLIENT with such information as may be required to show revised or additional details of construction.
- c. Should any discrepancies or conflicts on the PLANS or SPECIFICATIONS be discovered either prior to or after award of the contract, the ENGINEER's attention shall be called to the same before the work is begun thereon and the proper corrections made. Neither the CLIENT nor the CONTRACTOR may take advantage of any error or omission in the PLANS and SPECIFICATIONS. The ENGINEER will provide information when errors or omissions are discovered.

### GOVERNING BODIES

All work to be performed shall be completed in accordance with all requirements of any JURISDICTIONAL GOVERNING ENTITY, and all such pertinent laws, directives, ordinances and the like shall be considered to be a part of these SPECIFICATIONS. If a discrepancy is noted between the PLANS and SPECIFICATIONS and requirements of any JURISDICTIONAL GOVERNING ENTITY, the CLIENT and/or the CONTRACTOR shall immediately notify the ENGINEER in writing.

### LOCATION OF UNDERGROUND FACILITIES AND UTILITIES

When the PLANS and SPECIFICATIONS include information pertaining to the location of existing underground facilities and utilities (including but not limited to water mains, sanitary sewers, storm sewers, electric, telephone, gas and cable TV lines), such information represents only the opinion of the ENGINEER as to the approximate location and nature of such facilities and utilities. All locations where detailed positions of these facilities and utilities have been noted on the PLANS and SPECIFICATIONS shall be determined by the CONTRACTOR and located to the best of his ability, the horizontal location, elevation, size and material (if appropriate) of the facility and utility. The CONTRACTOR shall notify the ENGINEER at least 48 hours prior to construction if any discrepancies in existing utility information or conflicts with existing utilities exist. The ENGINEER reserves no responsibility whatever with respect to the sufficiency or accuracy of the information shown on the PLANS and SPECIFICATIONS relative to the location of underground facilities and utilities, nor the manner in which they are removed or adjusted.

It shall be the CONTRACTOR's responsibility prior to construction, to notify all Utility Companies of the intent to begin construction and to verify the actual location of all such facilities and utilities. The CONTRACTOR shall also obtain from the respective Utility Companies the working schedules for removing or adjusting these facilities.

### UNSUITABLE SOILS

The soils to be used shall be selected by the ENGINEER based on the assumption that all soils on the project are suitable to support the proposed improvements shown. The CLIENT or CONTRACTOR shall immediately notify the ENGINEER if he discovers or encounters an obstruction that prevents the installation of the improvement according to the line and grades shown on the PLANS.

### PROTECTION OF TREES

All trees that are not to be removed shall be protected from damage. Trees shall not be removed unless requested to do so in writing by the CLIENT.

### NOTIFICATION OF OWNERS OF FACILITIES AND UTILITIES

The CONTRACTOR shall notify all applicable Jurisdictional Governmental Entities or utility companies, i.e., water, sewer, electric, telephone, gas and cable TV prior to beginning any construction so that said entity or company can establish the location and elevation of underground pipes, conduits or cables adjoining or crossing proposed construction.

### TRAFFIC CONTROL

The CONTRACTOR shall provide when required by any JURISDICTIONAL GOVERNING ENTITY, all signs, equipment, and personnel necessary to provide for safe and efficient traffic flow in all areas where the work will interrupt, interfere or cause to change in any form, the conditions of traffic flow that existed prior to the commencement of any portions of the work. The CLIENT may, at his discretion, request the CONTRACTOR to furnish traffic control under these circumstances in which it is necessary for the protection of life and property. Emergency vehicle access shall be maintained at all times. Unless authorized by the CLIENT or CLIENT's construction representative, all existing access points shall be maintained at all times by the CONTRACTOR. The need for traffic control shall be anticipated by the CLIENT.

### WORK AREA

The CONTRACTOR, his agents and employees and all equipment, machinery and vehicles shall confine their work within the boundaries of the project or work area specified by the Client. The CONTRACTOR shall be solely liable for damage caused by him or his agents and employees and their equipment, machinery and vehicles on adjacent property or areas outside designated work areas.

### UTILITY POLES

It shall be the responsibility of the CONTRACTOR to arrange for the relocation or bracing of existing utility poles that may be within the working limits of the contract. It is expressly understood that all work and costs connected with the maintenance of these utility poles, their temporary relocations, etc., shall be the responsibility of the CLIENT and CONTRACTOR.

### RESTORATION

It is the intent of these SPECIFICATIONS that cleanup and final restoration shall be performed immediately upon completion of each phase of the work, both inside and outside the Project, or when directed by the CLIENT so that these areas will be restored as nearly as possible to their original condition or better, and shall include but not be limited to, restoration of maintained lawns and rights-of-way, roadways, driveways, sidewalks, ditches, bushes, hedges, trees, shrubs, fences, mailboxes, sewers, drains, tiles, water mains, etc.

### CLEANING UP

The CONTRACTOR shall maintain roadways adjoining the project site free from mud and debris at all times. If mud and/or debris is carried onto the roadways from vehicles entering onto the highway from either the CONTRACTOR's trucks, his employees' vehicles, or his material suppliers, the CONTRACTOR shall immediately remove said mud and/or debris.

### SAFETY AND PROTECTION

The CONTRACTOR shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. The CONTRACTOR shall also be responsible for the safety of his employees and the safety of the public. The CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR's duties and responsibilities for safety and for protection of the work shall continue until such time as all work is completed and the CLIENT has notified CONTRACTOR that the work is acceptable. The duties of the ENGINEER do not include review of the adequacy of either the CONTRACTOR's or the general public's safety in, or near the construction site.

### HOLD HARMLESS

To the fullest extent permitted by law, any CONTRACTOR, material supplier or other entity by use of these plans and specifications hereby waives any right of common law or statutory action to indemnify, release, save and hold harmless the CLIENT and ENGINEER and its agents, employees and consultants from and against all manner of claims, causes, losses, damages, expenses, including but not limited to, attorney fees arising out of, resulting from or in connection with the performance of any work, pursuant to or with respect to these plans and specifications. However, this indemnity shall not be construed to indemnify ENGINEER, its consultants, agents or employees against its own negligence.

Claims, damages, losses and expenses as these words are used, include but not be limited to (1) injury or damage occurring by reason of the failure or use or misuse of any rigging, blocking, scaffolding or any and all other kinds of items of equipment, whether or not caused by the CONTRACTOR or by another party, (2) all attorneys' fees and costs incurred in bringing an action to enforce the terms of this indemnity, (3) all expenses incurred by the indemnified party, its employees, at its usual rates plus costs or travel, long distance telephone and reproduction of documents and (4) consequential damages.

In any and all claims against the CLIENT or ENGINEER or any of their agents or employees and consultants by any party, including any employee of the CONTRACTOR or any Subcontractor, anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, the indemnification obligation shall be limited in any way by limitation on the amount of type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts or any insurance maintained by CONTRACTOR or any Subcontractor or any other party.

### INSURANCE

Any party using or relying on these plans, including any contractor, material supplier, or other entity shall obtain, (prior to commencing any work) general liability insurance insuring against all damages and claims for any bodily injuries, death or property damage arising out of any work, including the construction work provided for in these plans, and shall name the CLIENT and ENGINEER and his consultants, agents and representatives as additional insureds under such insurance policy; provided that any party using or relying on these plans having obligations to maintain specific insurance by reason of any agreement with CLIENT or any CONTRACTOR or ENGINEER shall provide evidence and certificates of insurance as required by such contract or agreement. Such insurance must contain a clause stating that the insurance is primary coverage for ENGINEER and ENGINEER's other applicable coverage is considered secondary. Such insurance shall not limit any liability of any party providing work or services or providing materials.

### THIRD PARTY BENEFICIARY

Manhard Consulting, Ltd., the ENGINEER, is intended to be a third party beneficiary of this willing agreement and requirement. Note: These Specifications are for Northern Illinois.

## DETAILED SPECIFICATIONS

### I. DEMOLITION

The CONTRACTOR shall coordinate with the utility companies prior to the removal and/or relocation of utilities. The CONTRACTOR shall coordinate with the utility companies prior to the removal and/or relocation of utilities. The CONTRACTOR shall coordinate with the utility company for their service. The CONTRACTOR is responsible for the removal of all structures.

Should removal and/or relocation activities damage features indicated to remain, the CONTRACTOR shall provide new materials/structures in accordance with the contract documents. Except for materials to be retained on the project, all other construction materials shall be new.

Prior to demolition occurring, all erosion control devices are to be installed.

All existing utility lines and conduits located under proposed buildings shall be removed and properly backfilled. All utility lines and conduits located under drives, on-site roads, parking lots or walkways shall be filled with a flexible backfill and end plowed. All existing structures shall be removed. All existing utility lines located under landscape areas shall be left in place and plowed at all structures.

The CONTRACTOR is responsible for demolition, removal and disposal in a location approved by all JURISDICTIONAL GOVERNING ENTITIES of all structures, pads, walls, flumes, foundations, road, parking facilities, drainage structures, utilities, etc., such that the improvements shown on these plans can be constructed. All demolition shall be in accordance with all applicable federal, state and local requirements. All facilities to be removed shall be undercut to suitable material and brought to grade with suitable compacted fill material per the specification.

Electrical, telephone, cable, water, fiber optic cable and/or gas lines needing to be removed shall be coordinated by the CONTRACTOR with the affected utility company.

CONTRACTOR must protect the ASTC at all times with fencing, barricades, enclosures, and other appropriate best management practices.

Continuous access shall be maintained for surrounding properties at all times during demolition.

All fire access lanes within the project area shall remain in service, clean of debris, and accessible for use by emergency vehicles.

The CONTRACTOR shall coordinate water main with the Fire Department and the JURISDICTIONAL GOVERNING ENTITY to plan the proposed improvements and to ensure adequate fire protection with the JURISDICTIONAL GOVERNING ENTITY during construction. Any costs associated with water main shut offs will be the responsibility of the CONTRACTOR and no extra compensation will be provided.

CONTRACTOR shall maintain all existing parking areas, sidewalks, drives, etc. clear and free from any construction activity and/or material to ensure easy and safe pedestrian and vehicular traffic to and from the site. CONTRACTOR shall coordinate/phase all construction activity within proximity of the building and utility interruptions with the facility manager to minimize disturbance and inconvenience to facility operations.

CONTRACTOR may limit saw-cut and pavement removal to only those areas where it is required as shown on these construction plans, however if any damage is incurred on any of the surrounding pavement, etc. the CONTRACTOR shall be responsible for its removal and repair.

Any existing wells encountered shall be exposed and sealed '3' below proposed grade by the CONTRACTOR in accordance with Section 920.120 (latest edition) of the Illinois Water Construction Code, Department of Public Health, and all applicable local rules and regulations. CONTRACTOR is responsible for obtaining all permits required by the JURISDICTIONAL GOVERNING ENTITIES for abandoning existing wells.

Any existing tanks and grease traps encountered shall have all liquids and solids removed and disposed of by a licensed commercial hauler in accordance with JURISDICTIONAL GOVERNING ENTITY regulations, and the tank and grease traps shall then be filled with suitable materials or removed from the site and disposed of by the CONTRACTOR.

Voids left by any item removed under any proposed building, pavement, walk, etc. or within 24" thereof shall be filled and compacted with suitable materials by the CONTRACTOR.

The CONTRACTOR shall be responsible for the disconnection of utility services to the existing buildings prior to demolition of the buildings.

Any material containing asbestos found within existing structures shall be removed from the site and disposed of by the CONTRACTOR in accordance with County, State and Federal regulations.

CONTRACTOR shall remove and/or relocate daily a program of dust control and shall submit and obtain JURISDICTIONAL GOVERNING ENTITY approval of dust control measures prior to demolition of any structures. Modification of dust control procedures shall be performed by the CONTRACTOR to the satisfaction of the JURISDICTIONAL GOVERNING ENTITY as requested.

The CONTRACTOR shall coordinate all demolition with the JURISDICTIONAL GOVERNING ENTITY and CLIENT to ensure protection and maintenance of sanitary sewer and water lines as necessary and to provide stormwater conveyance until new facilities are constructed, tested and placed into operation.

The locations of all existing utilities shown on this plan have been determined from the best information available and are given for the convenience of the CONTRACTOR and are not to be taken as the only obstacles that may occur on the site. The ENGINEER assumes no responsibility for any damage to any structures or property unless otherwise indicated, and to require complete performance of the work in spite of omissions of specific references to any minor component parts. It is the intent of the CONTRACTOR to not materially affect materials or work not covered by or properly inferred from any heading, branch, class or trade of the SPECIFICATIONS. CONTRACTOR shall supply any missing information as directed by the ENGINEER.

The CONTRACTOR is responsible for removing the existing irrigation system in the areas of proposed improvements. The contractor shall cap the existing irrigation system to remain such that the remaining system shall continue to function properly.

The parking lot shall be completed in sections such that it does not interrupt the facility operations. The CONTRACTOR shall coordinate with the construction manager for work to be performed.

This work shall be completed in conformance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition except as modified below.

**SOIL BORING DATA**

Sanitary sewer pipe including building services, shall conform to the following:

(1) Polyvinyl Chloride (PVC) Sewer Pipe shall conform to ASTM C034 (4-inch thru 15-inch) or ASTM F679 (18-inch thru 48-inch), minimum SDR 26 with flexible elastomeric seal gasket joints conforming to ASTM D321 and F477.

(2) Ductile Iron Sewer Pipe shall conform with ANSI/AWWA C151/A21.50, cement lined with push on type joints conforming to ANSI/AWWA C151/A21.11.

(3) Extra Strength Clay Sewer Pipe shall conform with ASTM Specification C700 (glazed) with ASTM D1784 type joints conforming to CLOW NO-BEL (MVWD only).

Sanitary sewers shall include bedding and backfill.

**MANHOLES**

Manholes shall be constructed in conformance with Section IIIA Manholes, etc. above. The concrete base and bottom section shall be constructed of precast reinforced concrete monolithic cast sections including, bell connection and invert flow lines. Manhole frame and lids shall be Neenah R-1772 or approved equal, with lids imprinted "SANITARY", with recessed pick holes. Manhole joints between adjustment rings and frames and between manholes sections shall be set for preformed plastic gasket consisting of a homogeneous blend of refined hydrocarbon resins and plasticizing compounds reinforced with fiber mesh to provide a tight seal. All pipe connection openings shall be precast with resilient rubber watertight pipe sleeves. A 10" elastomeric band (crown) shall be installed extending from the manhole top to the manhole frame as shown on detail. Manholes shall include steps, frame & grade, bedding and trench backfill.

**FOUNDATION, BEDDING AND HAUNCHING**

Foundation, Bedding and Haunching shall be wet coarse aggregate or moist fine aggregate in accordance with the above standards and placed as shown on the detail.

**TESTING**

Sanitary sewers shall be air tested and tested for deflection in accordance with the requirements of Section 31-1.12 "TESTING AND INSPECTION FOR ACROSS-SECTION" of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition except as modified below.

Further, the ENGINEER does not assume responsibility for the possibility that during construction, the soil and groundwater condition may be different than indicated. Neither does the ENGINEER assume responsibility for variations of soil and groundwater at location, type, spacing or depth of borings taken, nor of the accuracy or reliability of the information given in the results thereof.

The ENGINEER makes no representation or guarantee regarding earthwork quantities or that the earthwork for this project will balance due to the varying field conditions, changing soil types, allowable construction to tolerances and construction methods that are beyond the control of the ENGINEER.

**EARTHWORK CALCULATIONS AND CROSS SECTIONS**

The CONTRACTOR understands that any earthwork calculations, quantities or cross sections that have been furnished by the ENGINEER are for information only and are provided without any guarantee by the CLIENT or ENGINEER whatsoever as to their sufficiency or accuracy. CONTRACTOR warrants that he has performed his own subsurface investigations as necessary and his own calculations and cross sections to determine site soil conditions and earthwork volumes. The ENGINEER makes no representation or guarantee regarding earthwork quantities or that the earthwork for this project will balance due to the varying field conditions, changing soil types, allowable construction to tolerances and construction methods that are beyond the control of the ENGINEER.

**CLEARING, GRUBBING AND TREE REMOVAL**

The site shall be cleared, grubbed, trees and stumps removed where designated on the PLANS. Trees designated to remain shall be protected from damage.

**TOPSOIL STRIPPING**

Upon completion of demolition, clearing and tree removal, all topsoil shall be stripped from under all buildings and pavements areas, and other areas necessary to complete the work. Topsoil stripped shall be placed in stockpiles in locations as designated by the CLIENT.

**TOPSOIL RESTRIPPING**

Upon completion of topsoil restrip, the CONTRACTOR shall apply seed and fertilizer to all stripped areas in accordance with the above standards.

**SEEDING**

Upon completion of roadway and/or parking lot improvements and installation of underground utilities a minimum of six inches (6") of topsoil shall be reseeded over all unpaved areas which have been disturbed by earthwork construction, except building pads and other designated areas, which shall be kept free from topsoil.

**SODDING**

Upon completion of topsoil restrip, the CONTRACTOR shall install sod to all areas designated on the plans or as designated on the landscape drawings and specifications provided by the CLIENT.

**EXCAVATION AND EMBANKMENT**