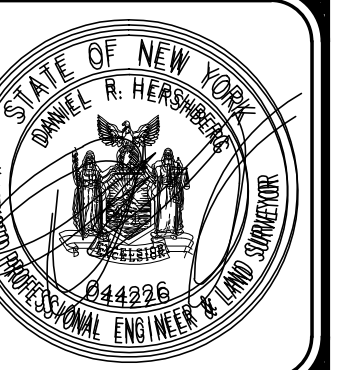


HERSHBERG & HERSHBERG

Consulting Engineers and Land Surveyors

18 Locust Street
Albany, New York 12203

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REVISIONS	DATE	REMARKS

REVISIONS

**EXISTING CONDITIONS
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY**

160052-3

DATE: 10/29/17

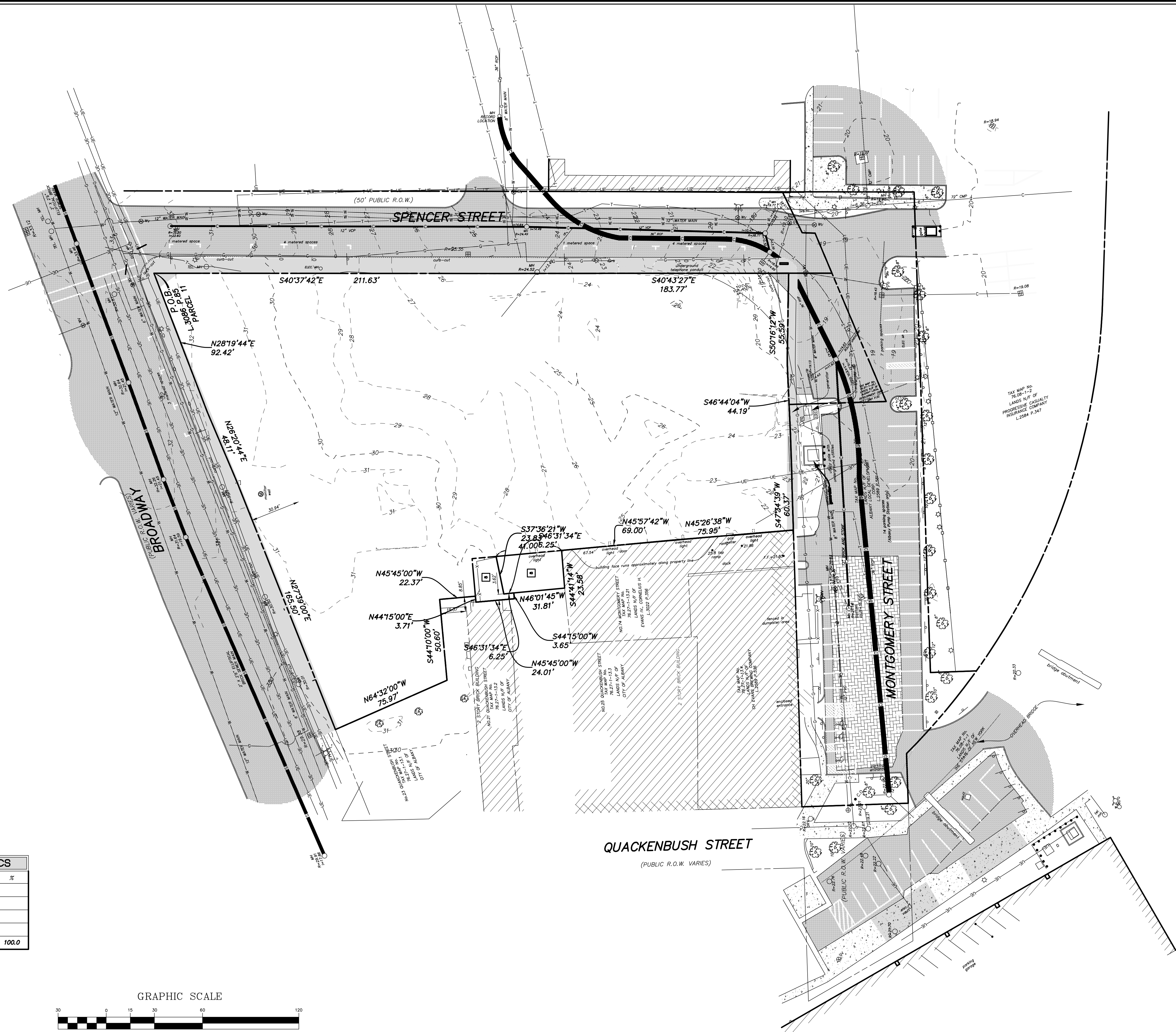
CHK: DRH

BY: AS

SCALE: 1"=30'

FILE: 160052

C1A



LEGEND

	MANHOLE
	CATCH BASIN
	SIGN
	OVERHEAD WIRE, UTILITY POLE
	WATER VALVE
	FIRE HYDRANT
	GAS VALVE
	LIGHT POLE
	EXISTING CONCRETE WALK
	EXISTING PAVEMENT
	EXISTING COMBINED SEWER
	EXISTING GAS MAIN
	EXISTING TEL LINE
	EXISTING SANITARY LINE
	EXISTING UNDERGROUND ELECTRIC
	EXISTING WATER MAIN
	EXISTING CONTOURS

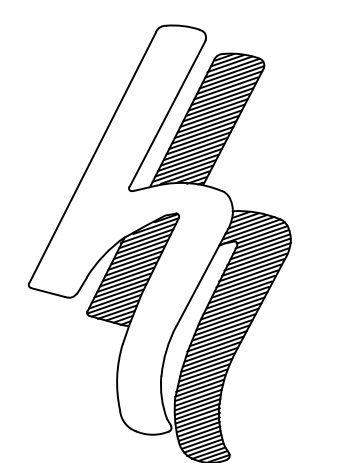
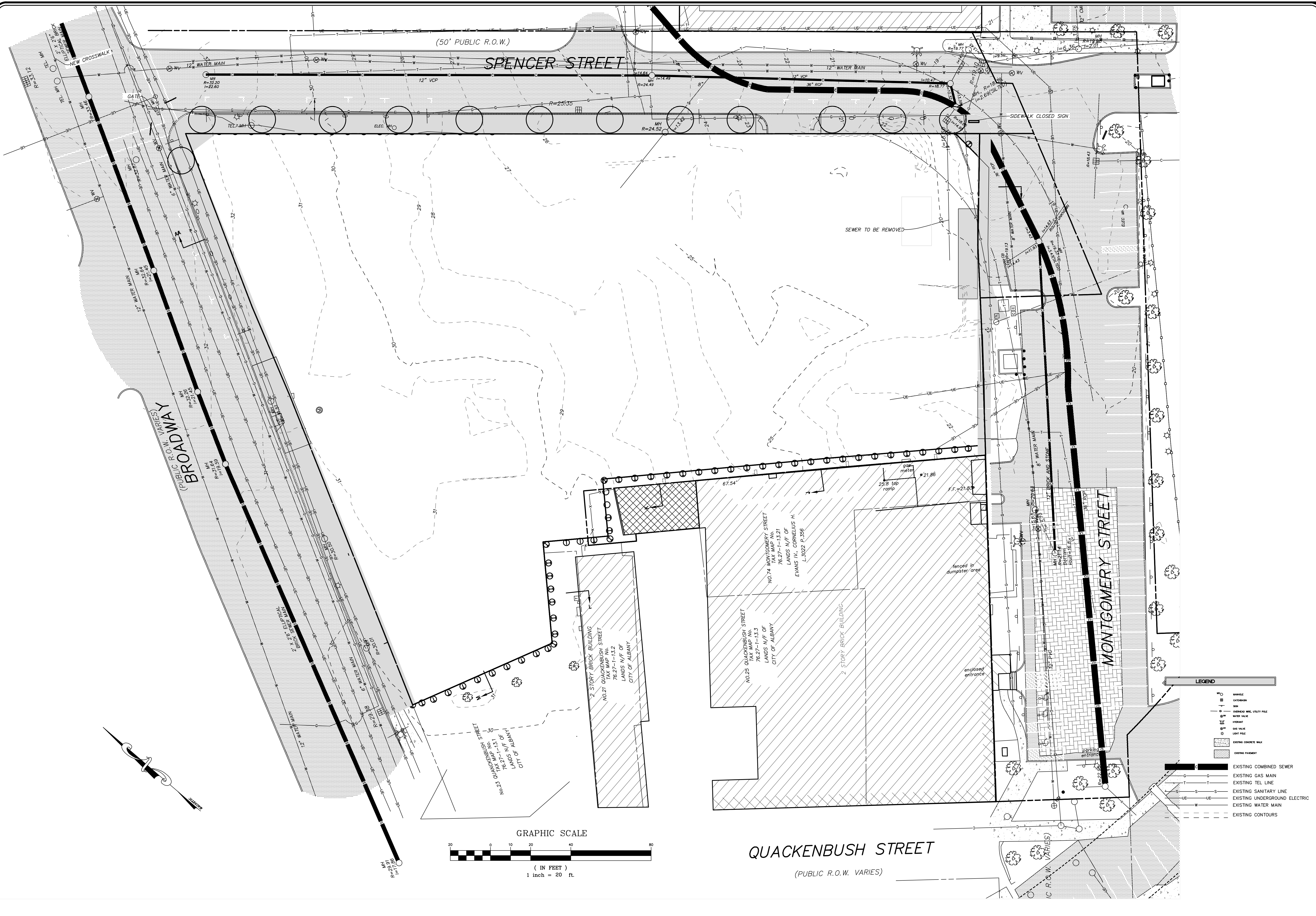
EXISTING SITE COVERAGE STATISTICS

description	s.f.	acres	%
Building Area	15,390		
Paved Area			
Sub-Total Impervious Area			
Green Area			
Total Area	71,291	1.64	100.0

GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.



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DATE	REMARKS
9/7/17	COMMENTS LETTER

REVISIONS

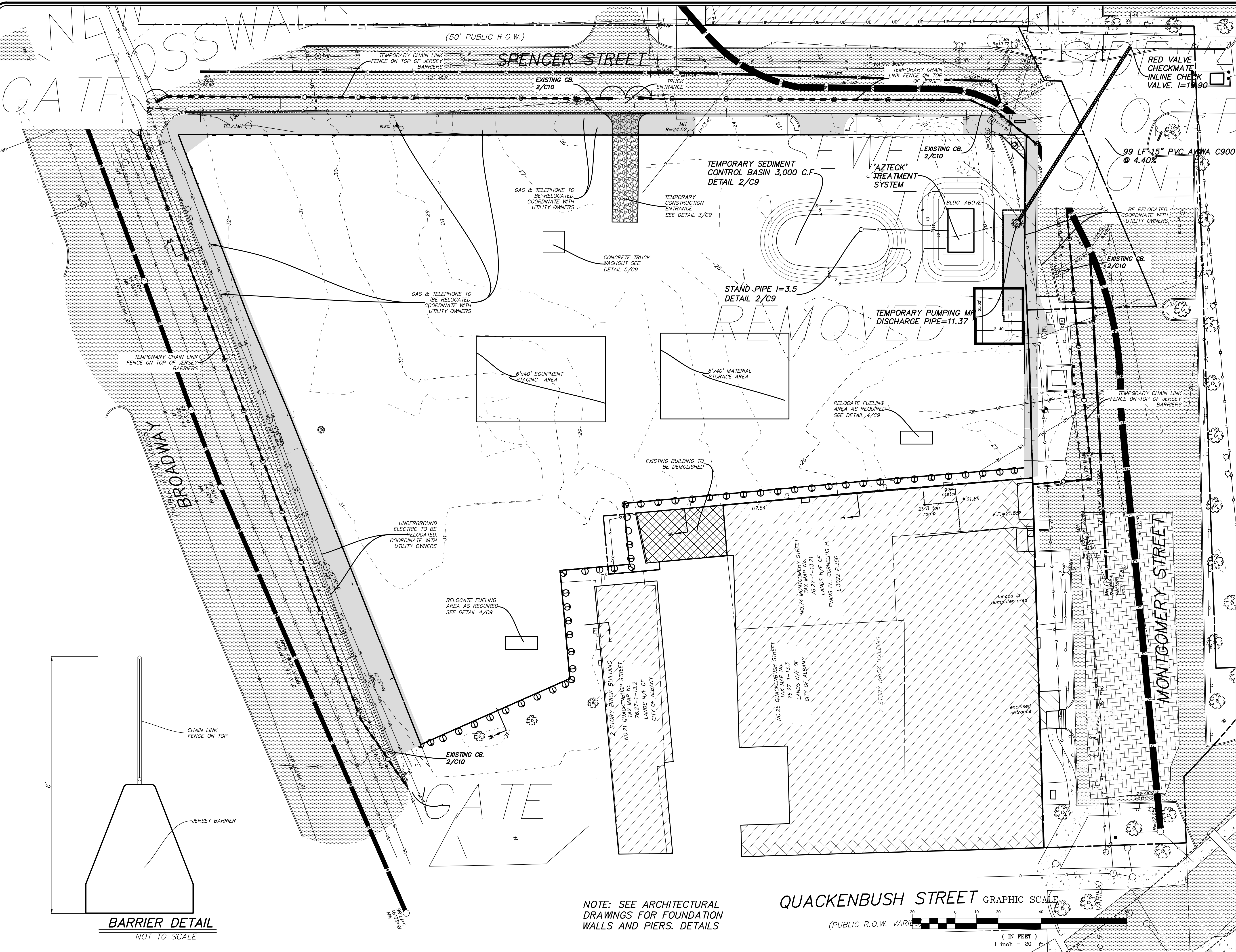
DEMOLITION PLAN
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

DATE: 12/27/16
 CHK: DRH
 BY: AS
 SCALE: 1"=20'
 FILE: 160052

C2

LEGEND

	MANHOLE
	CATCHBASIN
	OVERHEAD WIRE UTILITY POLE
	WATER VALVE
	RISE
	GAS VALVE
	LIGHT POLE
	EXISTING CONCRETE WALK
	EXISTING PAVEMENT
	EXISTING COMBINED SEWER
	EXISTING GAS MAIN
	EXISTING TEL LINE
	EXISTING SANITARY LINE
	EXISTING UNDERGROUND ELECTRIC
	EXISTING WATER MAIN
	EXISTING CONTOURS



RED VALVE CHECKMATE INLINE CHECK VALVE. I=18.90

99 LF 15" PVC ANKA C900 @ 4.40%

TEMPORARY SEDIMENT CONTROL BASIN 3,000 C.F. DETAIL 2/C9

'AZTECK' TREATMENT SYSTEM

STAND PIPE I=3.5 DETAIL 2/C9

TEMPORARY PUMPING M.D. DISCHARGE PIPE=11.37

6'x40' EQUIPMENT STAGING AREA

6'x40' MATERIAL STORAGE AREA

EXISTING BUILDING TO BE DEMOLISHED

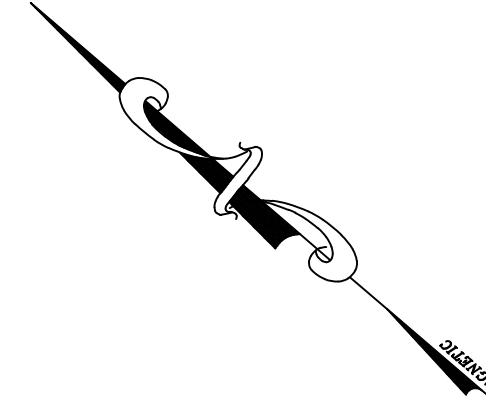
UNDERGROUND ELECTRIC TO BE RELOCATED. COORDINATE WITH UTILITY OWNERS

RELOCATE FUELING AREA AS REQUIRED. SEE DETAIL 4/C9

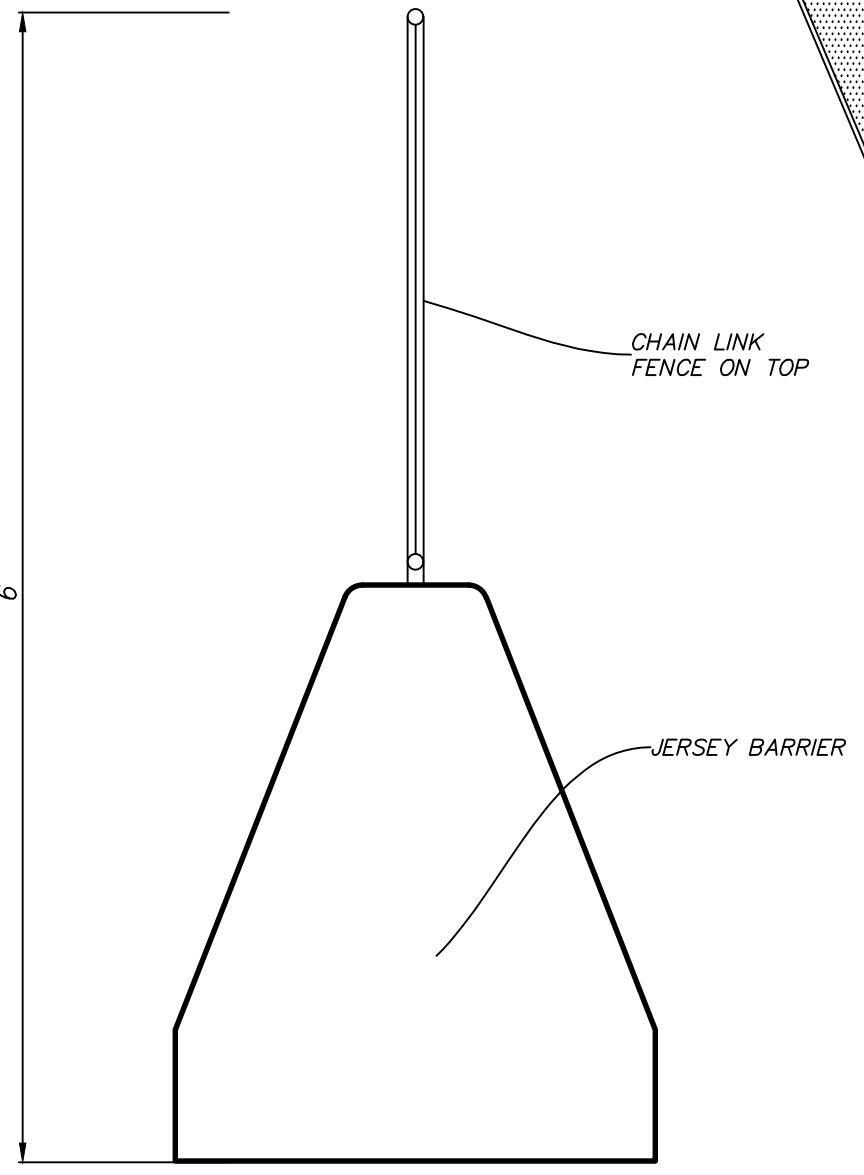
NOTE: SEE ARCHITECTURAL DRAWINGS FOR FOUNDATION WALLS AND PIERS. DETAILS

QUACKENBUSH STREET GRAPHIC SCALE

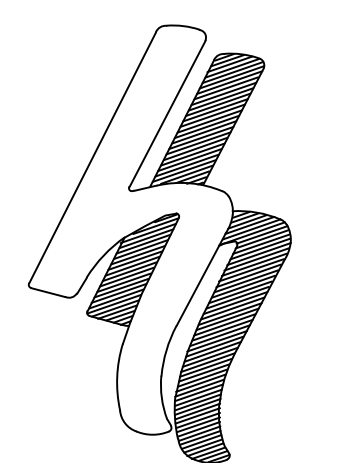
(PUBLIC R.O.W. VARIES) (IN FEET) 1 inch = 20 ft



LEGEND	
	EXISTING WATER VALVE
	EXISTING POLE WITH LIGHT
	EXISTING LIGHT POLE
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING CONTOURS
	EXISTING UNDERGROUND ELECTRIC
	EXISTING GAS MAIN
	EXISTING UNDERGROUND TELEPHONE
	EXISTING OVERHEAD WIRE
	EXISTING WATER MAIN
	EXISTING HYDRANT
	EXISTING COMBINED SEWER
	EXISTING COMBINED SEWER
	EXISTING SANITARY SEWER MAIN
	EXISTING STORM SEWER MAIN
	EXISTING CATCH BASIN
	EXISTING MANHOLE
	EXISTING PAVEMENT
	EXISTING PAVEMENT
	PROPOSED CONTOURS
	PROPOSED STORM SEWER




BARRIER DETAIL NOT TO SCALE



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STATE OF NEW YORK
JAMES R. HERSHBERG
No. 14426
PROFESSIONAL ENGINEER - CIVIL

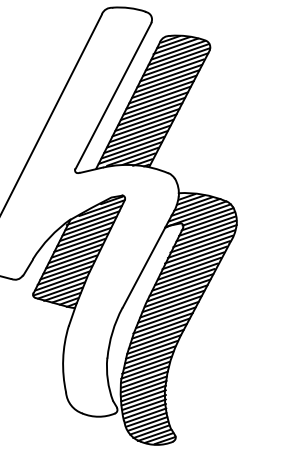
DATE	REMARKS	REVISIONS
9/15/17	STORM SEWER UPDATED	

FILE: 160052 CHK: DRH DATE: 12/27/16 160052-3

GRADING PLAN
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

SCALE: 1"=20' BY: AS

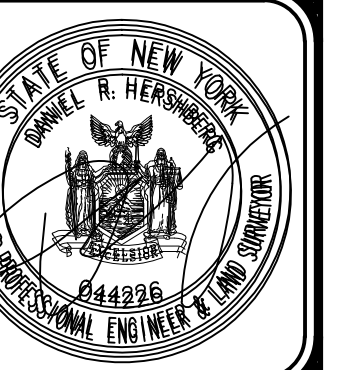
C3



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DATE	REVISIONS

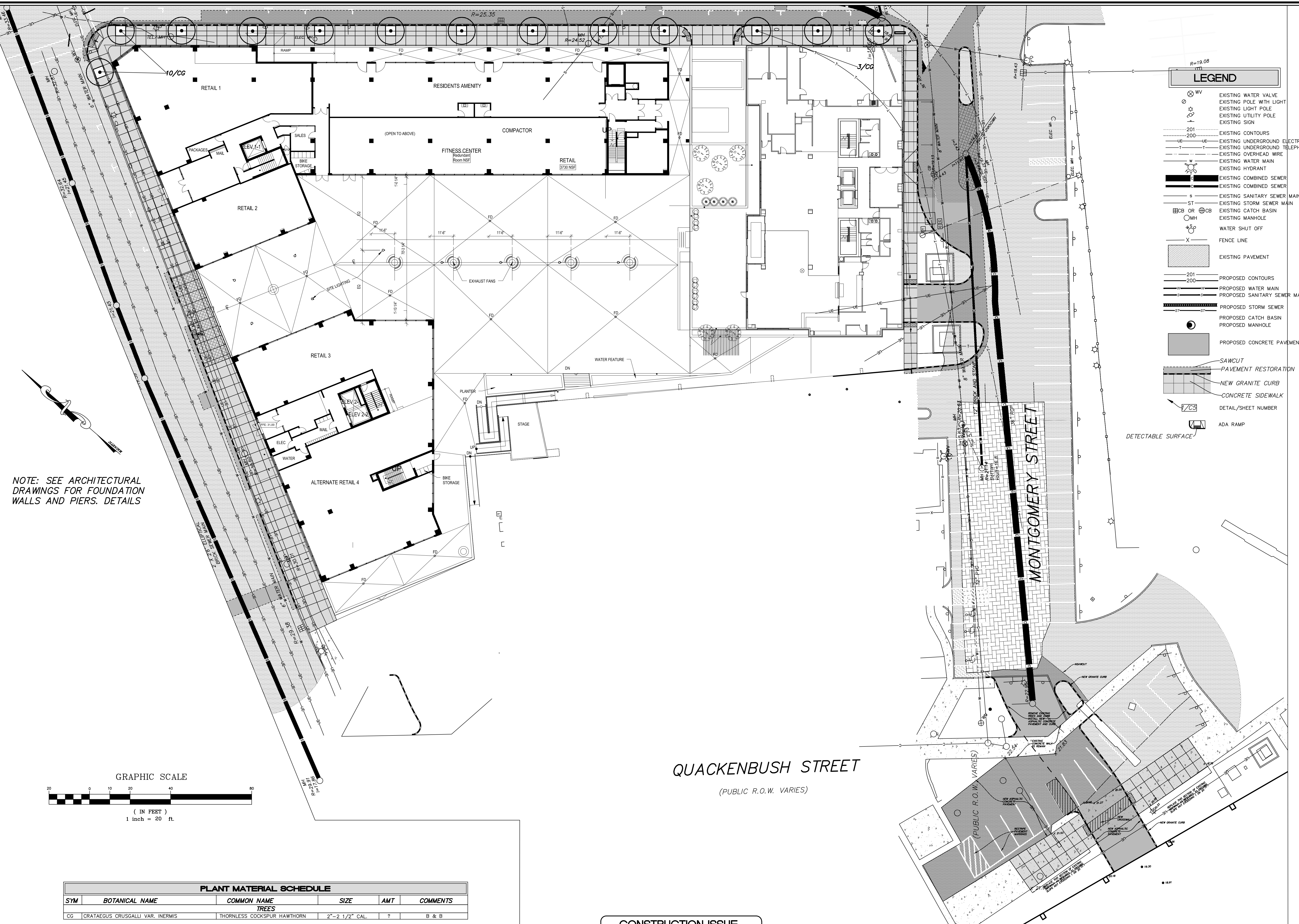
SITE PLAN
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

FILE: 160652
SCALE: 1"=20'
BY: AS
CHK: DRH
DATE: 12/27/16
160652-3

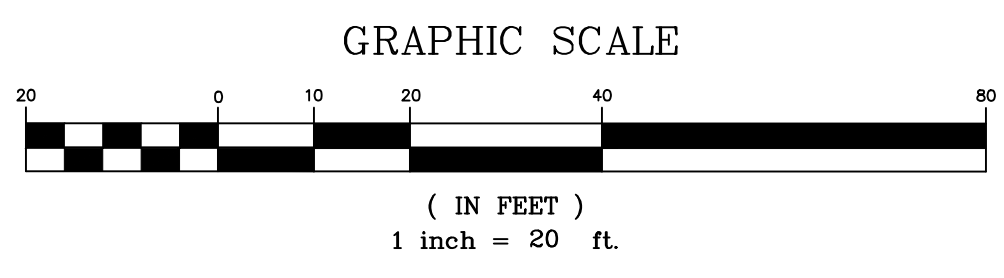
C4

LEGEND

- ⊗ WV EXISTING WATER VALVE
- ⊕ EXISTING POLE WITH LIGHT
- ⊕ EXISTING LIGHT POLE
- ⊕ EXISTING UTILITY POLE
- ⊕ EXISTING SIGN
- 201 EXISTING CONTOURS
- 200 EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD WIRE
- ⊕ EXISTING WATER MAIN
- ⊕ EXISTING HYDRANT
- ⊕ EXISTING COMBINED SEWER
- ⊕ EXISTING COMBINED SEWER
- S EXISTING SANITARY SEWER MAIN
- ST EXISTING STORM SEWER MAIN
- ⊕ CB OR ⊕ CB EXISTING CATCH BASIN
- ⊕ MH EXISTING MANHOLE
- ⊕ WS WATER SHUT OFF
- X FENCE LINE
- EXISTING PAVEMENT
- 201 PROPOSED CONTOURS
- 200 PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER MAIN
- PROPOSED STORM SEWER
- PROPOSED CATCH BASIN
- PROPOSED MANHOLE
- PROPOSED CONCRETE PAVEMENT
- SAWCUT PAVEMENT RESTORATION
- NEW GRANITE CURB
- CONCRETE SIDEWALK
- 7/C5 DETAIL/SHEET NUMBER
- ADA RAMP
- DETECTABLE SURFACE

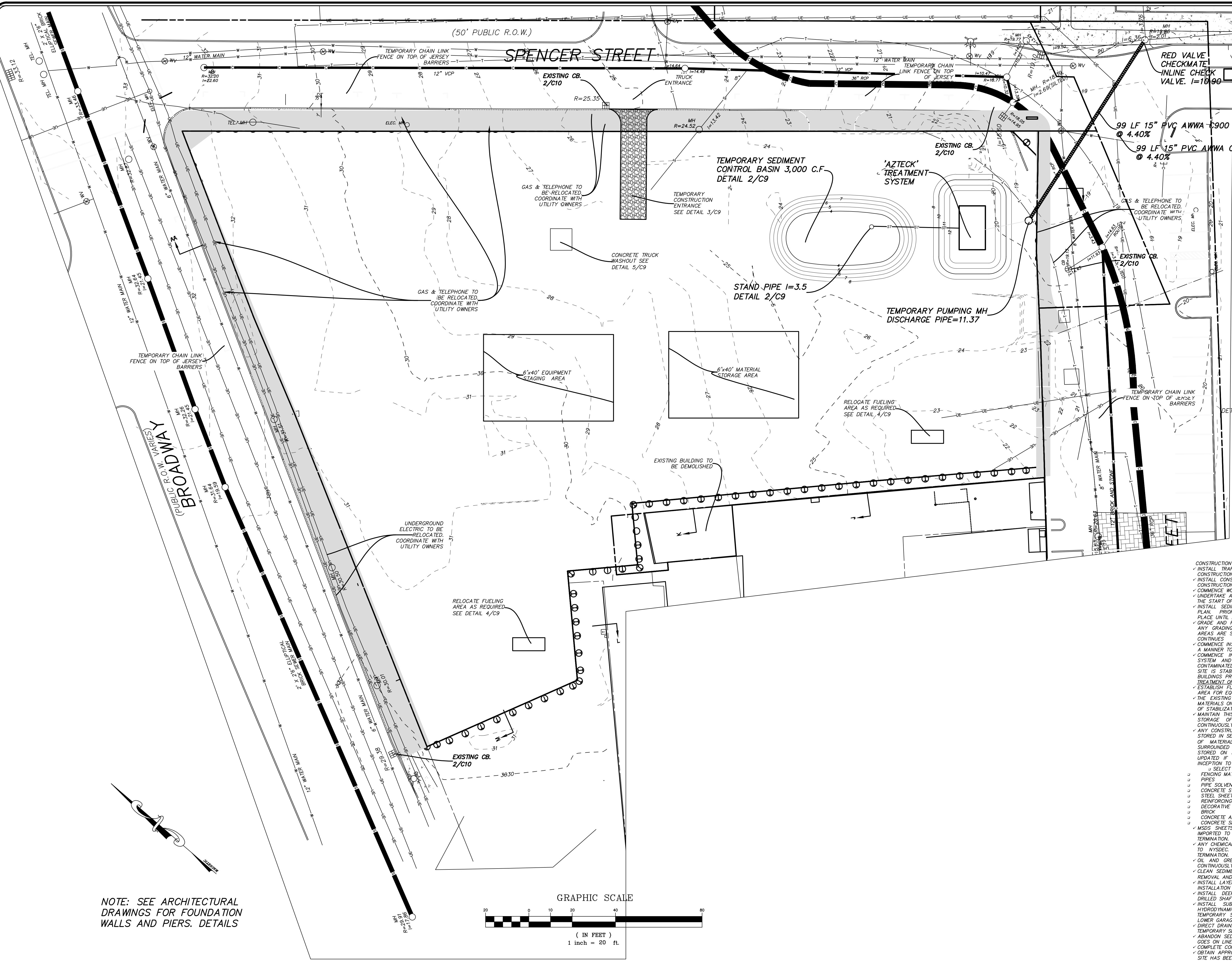


NOTE: SEE ARCHITECTURAL DRAWINGS FOR FOUNDATION WALLS AND PIERS. DETAILS



PLANT MATERIAL SCHEDULE					
SYM	BOTANICAL NAME	COMMON NAME	SIZE	AMT	COMMENTS
TREES					
CG	CRATAEGUS CRUSGALLI VAR. INERMIS	THORNLESS COCKSPUR HAWTHORN	2"-2 1/2" CAL.	?	B & B

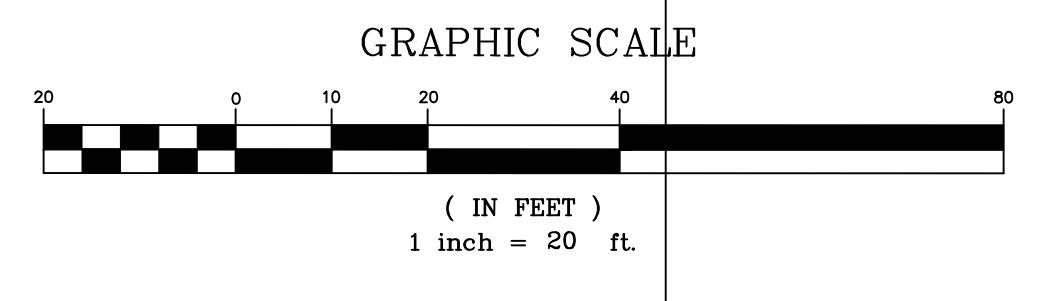
CONSTRUCTION ISSUE



LEGEND

- ⊗ WV EXISTING WATER VALVE
- ⊗ EXISTING POLE WITH LIGHT
- ⊗ EXISTING LIGHT POLE
- ⊗ EXISTING UTILITY POLE
- ⊗ EXISTING SIGN
- EXISTING CONTOURS
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING OVERHEAD WIRE
- EXISTING WATER MAIN
- EXISTING HYDRANT
- EXISTING COMBINED SEWER
- EXISTING COMBINED SEWER
- EXISTING SANITARY SEWER MAIN
- EXISTING STORM SEWER MAIN
- ⊗ CB OR ⊗ CB EXISTING CATCH BASIN
- ⊗ MH EXISTING MANHOLE
- ⊗ X WATER SHUT OFF
- FENCE LINE
- EXISTING PAVEMENT
- PROPOSED CONTOURS
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER MAIN
- PROPOSED STORM SEWER
- ⊗ PROPOSED CATCH BASIN
- ⊗ PROPOSED MANHOLE
- PROPOSED CONCRETE PAVEMENT
- SAWCUT
- PAVEMENT RESTORATION
- NEW GRANITE CURB
- CONCRETE SIDEWALK
- DETAIL/SHEET NUMBER
- ADA RAMP
- DETECTABLE SURFACE

NOTE: SEE ARCHITECTURAL DRAWINGS FOR FOUNDATION WALLS AND PIERS. DETAILS



CONSTRUCTION SEQUENCE

- INSTALL TRAFFIC CONTROLS AS REQUIRED. PRIOR TO THE START OF ANY CONSTRUCTION.
- INSTALL CONSTRUCTION FENCING AS REQUIRED. PRIOR TO THE START OF ANY CONSTRUCTION.
- COMMENCE WORK ON SITE.
- UNDERTAKE ANY UTILITY RELOCATIONS OR ABANDONMENT REQUIRED. PRIOR TO THE START OF ANY INSTALLATION OF SHORING OR SHEET PILING.
- INSTALL SEDIMENTATION FENCE OR OTHER CONTROLS AS INDICATED ON THE PLAN. PRIOR TO COMMENCEMENT OF ANY GRADING - FENCE TO REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED.
- GRADE AND PREPARE CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF ANY GRADING - CONSTRUCTION ENTRANCE TO REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED. THIS MAY BE RELOCATED AS SHEETING AND SHORING CONTINUES.
- COMMENCE INSTALLATION OF SHORING AND SHEET PILES. PLAN INSTALLATION IN A MANNER TO ALLOW ACCESS FOR EXCAVATION OF FILL.
- COMMENCE INSTALLATION OF THE TEMPORARY SEDIMENT TRAP, TREATMENT SYSTEM AND DISCHARGE PIPE. THIS SHOULD BE THE FIRST AREA OF CONTAMINATED FILL REMOVAL. EXCAVATION SYSTEM TO BE MAINTAINED UNTIL SITE IS STABILIZED AND MAY BE REQUIRED UNTIL CONSTRUCTION OF ON SITE BUILDINGS PROCEEDS TO THE INSTALLATION OF THE PERMANENT SYSTEM. SEE TREATMENT OF WATER PRIOR TO DISCHARGE FOR ADDITIONAL INFORMATION.
- ESTABLISH FUELING AREA. RELOCATE WHEN REQUIRED. MAINTAIN A FUELING AREA FOR EQUIPMENT UNTIL NO LONGER REQUIRED.
- THE EXISTING PAVEMENT MUST BE KEPT SWEEP CLEAN TO AVOID TRACKING MATERIALS ONTO ANY STREETS. CONTINUOUSLY FROM INCEPTION TO COMPLETION OF STABILIZATION OR FILING OF NOTICE OF TERMINATION.
- MAINTAIN THIS AREA CLEAN OF DEBRIS AND VERIFY CONDITION AND SAFETY OF STORAGE OF MATERIALS LISTED BELOW. REQUIRES DAILY INSPECTION, CONTINUOUSLY FROM INCEPTION TO FILING OF NOTICE OF TERMINATION.
- ANY CONSTRUCTION MATERIALS, CHEMICALS OR CONSTRUCTION DEBRIS MUST BE STORED IN SEALED RECEPTILES, TRAILERS OR BUILDINGS. ANY STORAGE PILES OF MATERIALS MEANT FOR INSTALLATION (I.E., SAND, ETC.) MUST BE SURROUNDED BY SEDIMENTATION FENCE. THE LIST OF ANTICIPATED MATERIALS STORED ON SITE DURING CONSTRUCTION IS PROVIDED BELOW AND MUST BE UPDATED IF ANY ADDITIONAL MATERIALS ARE UTILIZED. CONTINUOUSLY FROM INCEPTION TO FILING OF NOTICE OF TERMINATION.
- SELECT FILL
- FENCING MATERIALS
- PILES
- PIPE SOLVENTS
- CONCRETE STRUCTURES
- STEEL SHEETING
- REINFORCING STEEL
- DECORATIVE STONE
- BRICK
- CONCRETE ADDITIVES
- CONCRETE SEALERS
- MSDS SHEETS MUST BE AVAILABLE ON SITE FOR ALL MATERIALS USED OR IMPORTED TO THE SITE. CONTINUOUSLY FROM INCEPTION TO FILING OF NOTICE OF TERMINATION.
- ANY CHEMICAL SPILLS MUST BE CONTAINED IMMEDIATELY ON SITE AND REPORTED TO NYSDC. CONTINUOUSLY FROM INCEPTION TO FILING OF NOTICE OF TERMINATION.
- OIL AND GREASE SPILLS FROM EQUIPMENT SHALL BE TREATED IMMEDIATELY. CONTINUOUSLY FROM INCEPTION TO FILING OF NOTICE OF TERMINATION.
- CLEAN SEDIMENT TRAP AS REQUIRED. CONTINUOUSLY FROM INSTALLATION UNTIL REMOVAL AND TRANSFER TO STORAGE/TREATMENT SYSTEM.
- INSTALL LAYER OF CRUSHED STONE TO STABILIZE SITE. AS REQUIRED TO ALLOW INSTALLATION OF DEEP FOUNDATION.
- INSTALL DEEP FOUNDATION CURRENTLY PROPOSED TO BE CAST-IN-PLACE DRILLED SHAFT MICROPILES UNTIL COMPLETION OF DEEP FOUNDATION.
- INSTALL SUB SLAB UTILITIES INCLUDING STORM WATER STORAGE TANK, HYDRODYNAMIC SEPARATOR AND COLLECTION PIPES. PRIOR TO REMOVAL OF TEMPORARY SEDIMENT TRAP. PRIOR TO PLACEMENT OF FLOOR OF RAMP TO LOWER GARAGE.
- DIRECT DRAINAGE TO STORAGE AND TREATMENT SYSTEM. PRIOR TO REMOVAL OF TEMPORARY SEDIMENT TRAP.
- ABANDON SEDIMENT TRAP. AFTER PERMANENT STORAGE AND TREATMENT SPACE GOES ON LINE.
- COMPLETE CONSTRUCTION OF PROJECT.
- OBTAIN APPROVAL ON NOTICE OF TERMINATION FROM MSA COORDINATOR AFTER SITE HAS BEEN STABILIZED. PRIOR TO FILING OF NOTICE OF TERMINATION.
- FILE NOTICE OF TERMINATION.

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STATE OF NEW YORK
JAMES R. HERSHBERG
Professional Engineer in Civil Engineering
No. 64420

DATE	REMARKS
8/31/17	COMMENTS LETTER
9/7/17	COMMENTS LETTER
9/15/17	STORM SEWER UPDATED
10/11/17	RED VALVE CHECKMATE IN-LINE CHECK VALVE

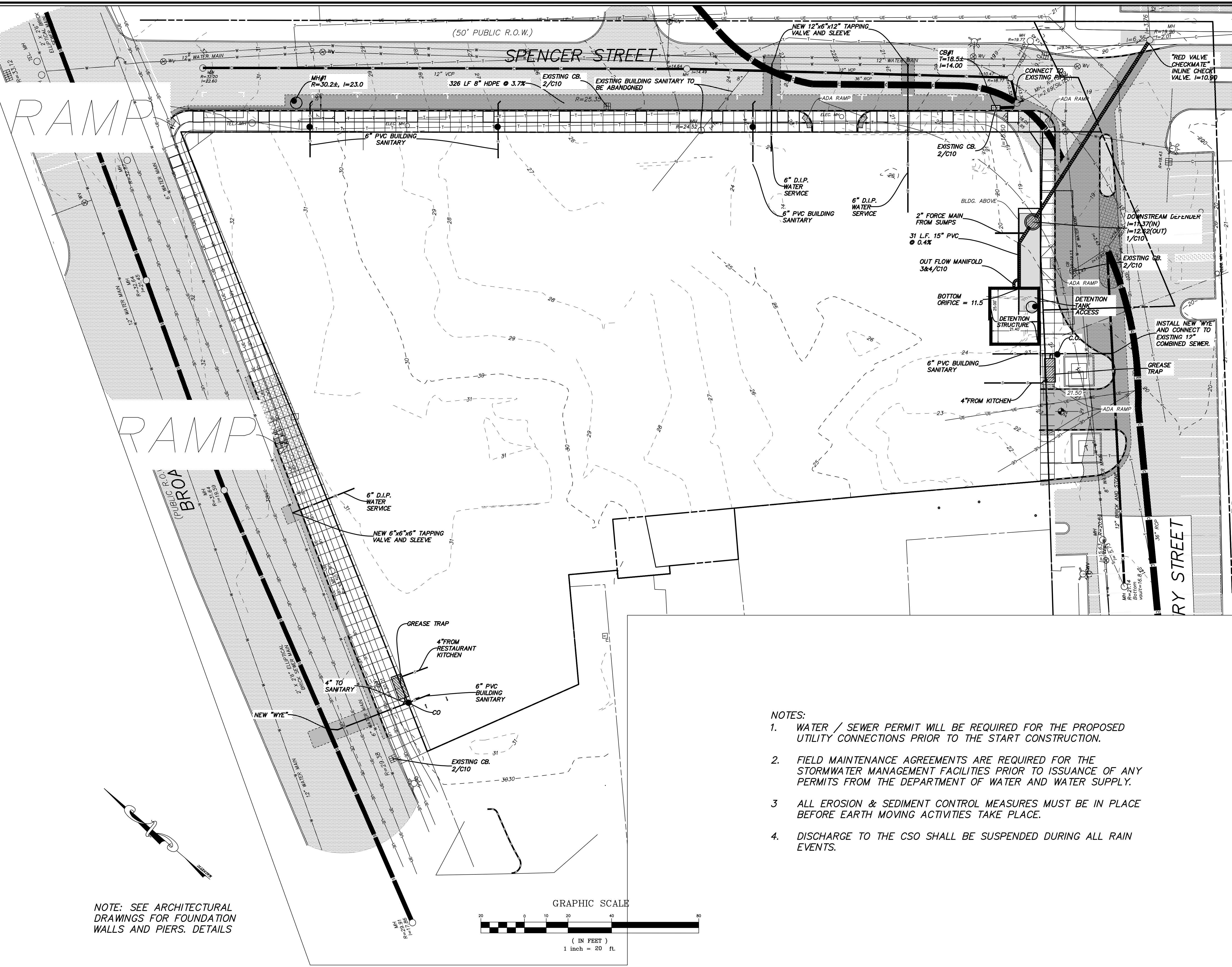
REVISIONS

SEDIMENTATION AND EROSION CONTROL PLAN
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

SCALE: 1"=20'
DATE: 12/27/16
CHK: DRH
BY: AS
FILE: 160052

CONSTRUCTION ISSUE

C5

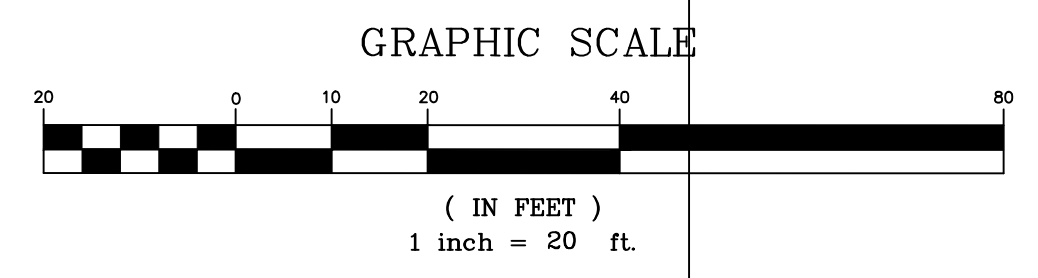


RAMP

RAMP

PUBLIC ROW

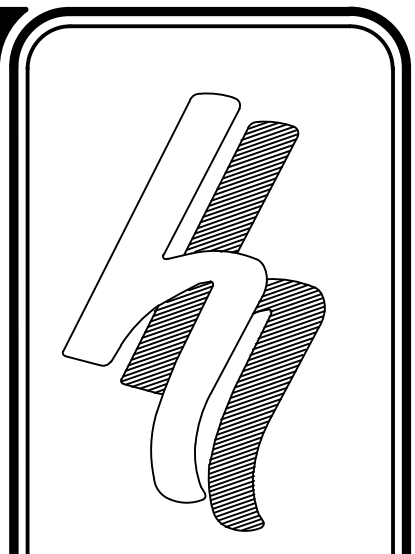
NOTE: SEE ARCHITECTURAL DRAWINGS FOR FOUNDATION WALLS AND PIERS. DETAILS



- NOTES:
1. WATER / SEWER PERMIT WILL BE REQUIRED FOR THE PROPOSED UTILITY CONNECTIONS PRIOR TO THE START CONSTRUCTION.
 2. FIELD MAINTENANCE AGREEMENTS ARE REQUIRED FOR THE STORMWATER MANAGEMENT FACILITIES PRIOR TO ISSUANCE OF ANY PERMITS FROM THE DEPARTMENT OF WATER AND WATER SUPPLY.
 3. ALL EROSION & SEDIMENT CONTROL MEASURES MUST BE IN PLACE BEFORE EARTH MOVING ACTIVITIES TAKE PLACE.
 4. DISCHARGE TO THE CSO SHALL BE SUSPENDED DURING ALL RAIN EVENTS.

LEGEND	
	EXISTING WATER VALVE
	EXISTING POLE WITH LIGHT
	EXISTING LIGHT POLE
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING CONTOURS
	EXISTING UNDERGROUND ELECTRIC
	EXISTING UNDERGROUND TELEPHONE
	EXISTING OVERHEAD WIRE
	EXISTING WATER MAIN
	EXISTING HYDRANT
	EXISTING COMBINED SEWER
	EXISTING COMBINED SEWER
	EXISTING SANITARY SEWER MAIN
	EXISTING STORM SEWER MAIN
	EXISTING CATCH BASIN
	EXISTING MANHOLE
	WATER SHUT OFF
	FENCE LINE
	EXISTING PAVEMENT
	PROPOSED CONTOURS
	PROPOSED WATER MAIN
	PROPOSED SANITARY SEWER MAIN
	PROPOSED STORM SEWER
	PROPOSED CATCH BASIN
	PROPOSED MANHOLE
	PROPOSED CONCRETE PAVEMENT
	SAWCUT PAVEMENT RESTORATION
	NEW GRANITE CURB
	CONCRETE SIDEWALK
	DETAIL/SHEET NUMBER
	ADA RAMP
	DETECTABLE SURFACE

CONSTRUCTION ISSUE



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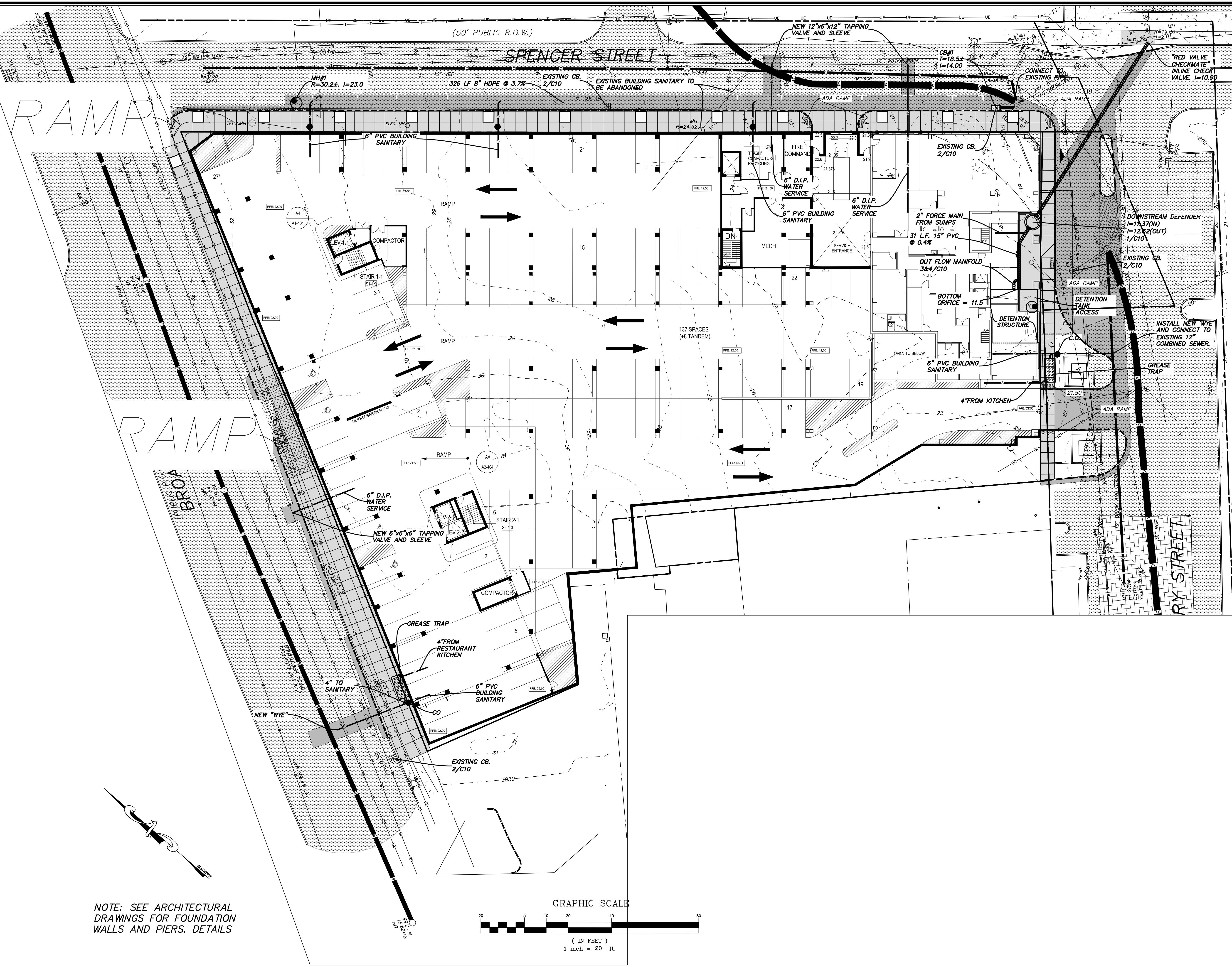


DATE	REMARKS
8/21/17	COMMENTS LETTER
9/7/17	COMMENTS LETTER
10/21/17	RED VALVE CHECKMATE INLINE CHECK VALVE

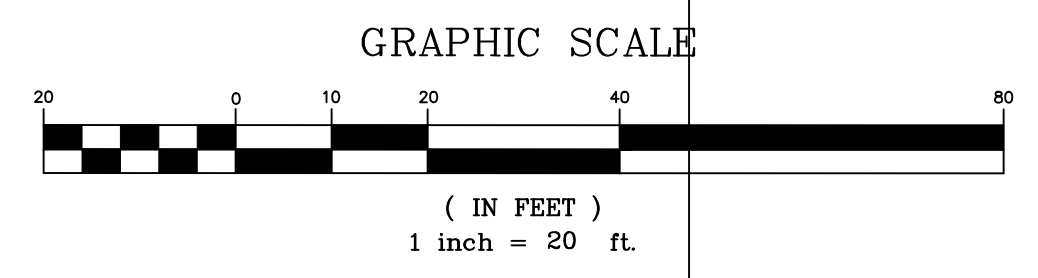
LOWER GARAGE
STORM SEWER, SANITARY SEWER AND WATER SERVICE CONNECTIONS
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

C6

FILE: 160952 SCALE: 1"=20' DATE: 12/27/16 CHK: DRH BY: AS 160952-3



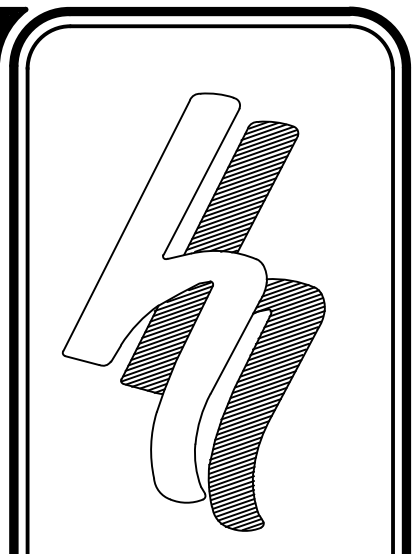
NOTE: SEE ARCHITECTURAL DRAWINGS FOR FOUNDATION WALLS AND PIERS. DETAILS



LEGEND	
	EXISTING WATER VALVE
	EXISTING POLE WITH LIGHT
	EXISTING LIGHT POLE
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING CONTOURS
	EXISTING UNDERGROUND ELECTRIC
	EXISTING UNDERGROUND TELEPHONE
	EXISTING OVERHEAD WIRE
	EXISTING WATER MAIN
	EXISTING HYDRANT
	EXISTING COMBINED SEWER
	EXISTING COMBINED SEWER
	EXISTING SANITARY SEWER MAIN
	EXISTING STORM SEWER MAIN
	EXISTING CATCH BASIN
	EXISTING MANHOLE
	WATER SHUT OFF
	FENCE LINE
	EXISTING PAVEMENT
	PROPOSED CONTOURS
	PROPOSED WATER MAIN
	PROPOSED SANITARY SEWER MAIN
	PROPOSED STORM SEWER
	PROPOSED CATCH BASIN
	PROPOSED MANHOLE
	PROPOSED CONCRETE PAVEMENT
	SAWCUT
	PAVEMENT RESTORATION
	NEW GRANITE CURB
	CONCRETE SIDEWALK
	DETAIL/SHEET NUMBER
	ADA RAMP

CONSTRUCTION ISSUE

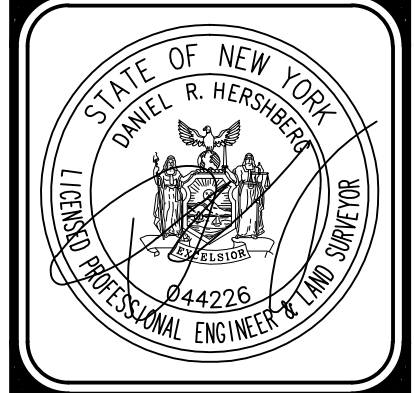
DETECTABLE SURFACE



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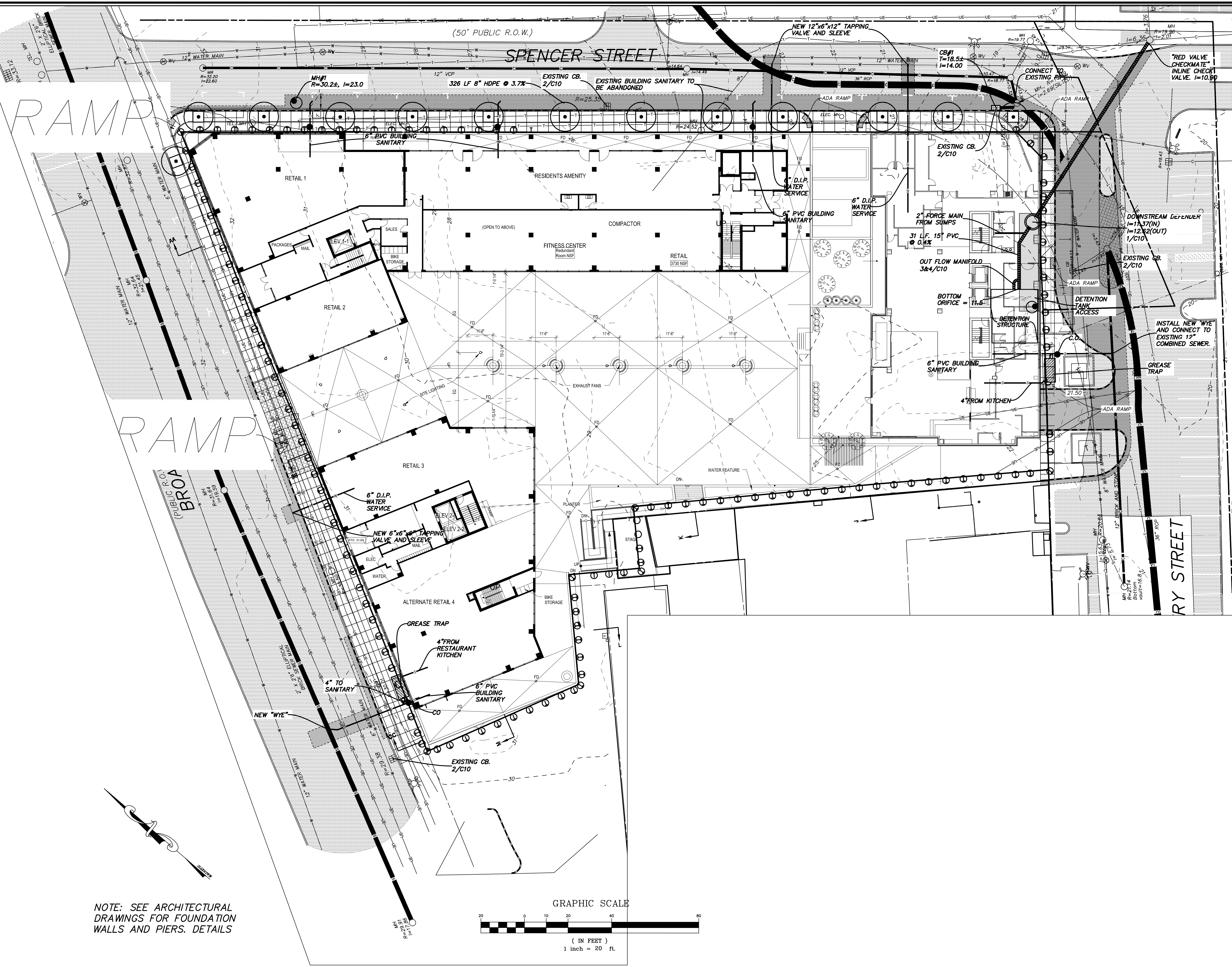


DATE	REVISIONS
10/21/17	RED VALVE CHECKMATE IN-LINE CHECK VALVE

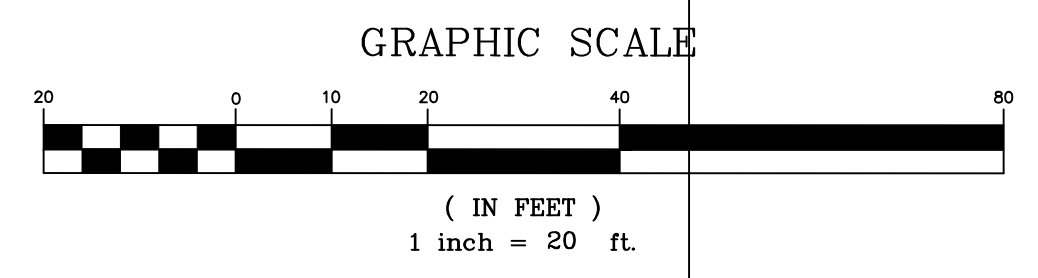
GARAGE STORM SEWER, SANITARY SEWER AND WATER SERVICE CONNECTIONS
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

FILE: 160952
SCALE: 1"=20'
DATE: 12/27/16
CHK: DRH
BY: AS
160952-3

C7



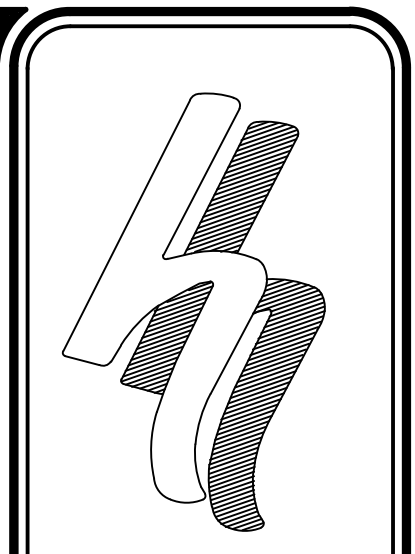
NOTE: SEE ARCHITECTURAL DRAWINGS FOR FOUNDATION WALLS AND PIERS. DETAILS



LEGEND	
	EXISTING WATER VALVE
	EXISTING POLE WITH LIGHT
	EXISTING LIGHT POLE
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING CONTOURS
	EXISTING CONTOURS
	EXISTING UNDERGROUND ELECTRIC
	EXISTING UNDERGROUND TELEPHONE
	EXISTING OVERHEAD WIRE
	EXISTING WATER MAIN
	EXISTING HYDRANT
	EXISTING COMBINED SEWER
	EXISTING COMBINED SEWER
	EXISTING SANITARY SEWER MAIN
	EXISTING STORM SEWER MAIN
	EXISTING CATCH BASIN
	EXISTING MANHOLE
	WATER SHUT OFF
	FENCE LINE
	EXISTING PAVEMENT
	PROPOSED CONTOURS
	PROPOSED CONTOURS
	PROPOSED WATER MAIN
	PROPOSED SANITARY SEWER MAIN
	PROPOSED STORM SEWER
	PROPOSED CATCH BASIN
	PROPOSED MANHOLE
	PROPOSED CONCRETE PAVEMENT
	SAWCUT PAVEMENT RESTORATION
	NEW GRANITE CURB
	CONCRETE SIDEWALK
	DETAIL/SHEET NUMBER
	ADA RAMP

CONSTRUCTION ISSUE

DETECTABLE SURFACE



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Consulting Engineers and Land Surveyors

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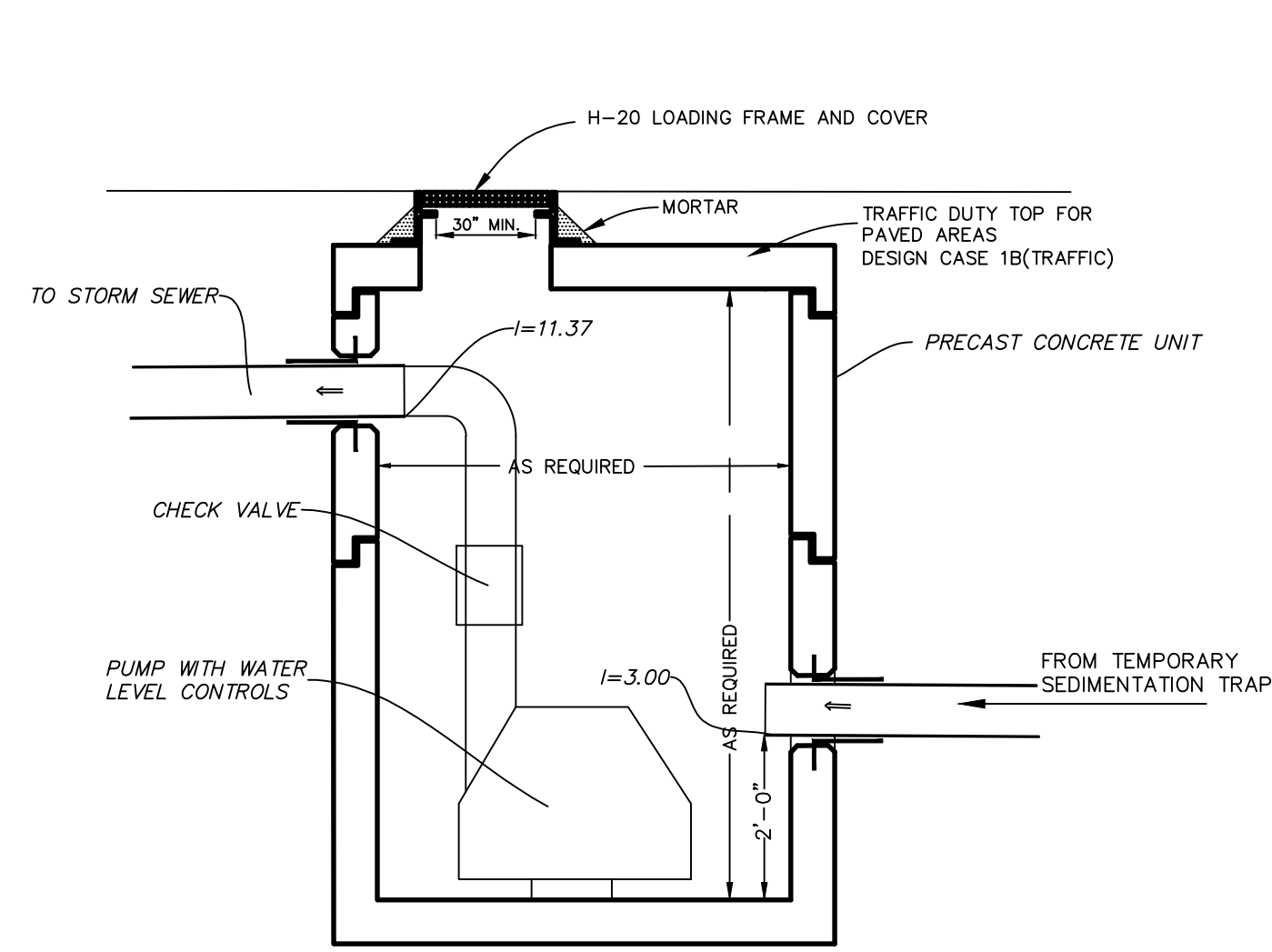


DATE	REVISIONS
10/21/17	RED VALVE CHECKMATE IN-LINE CHECK VALVE

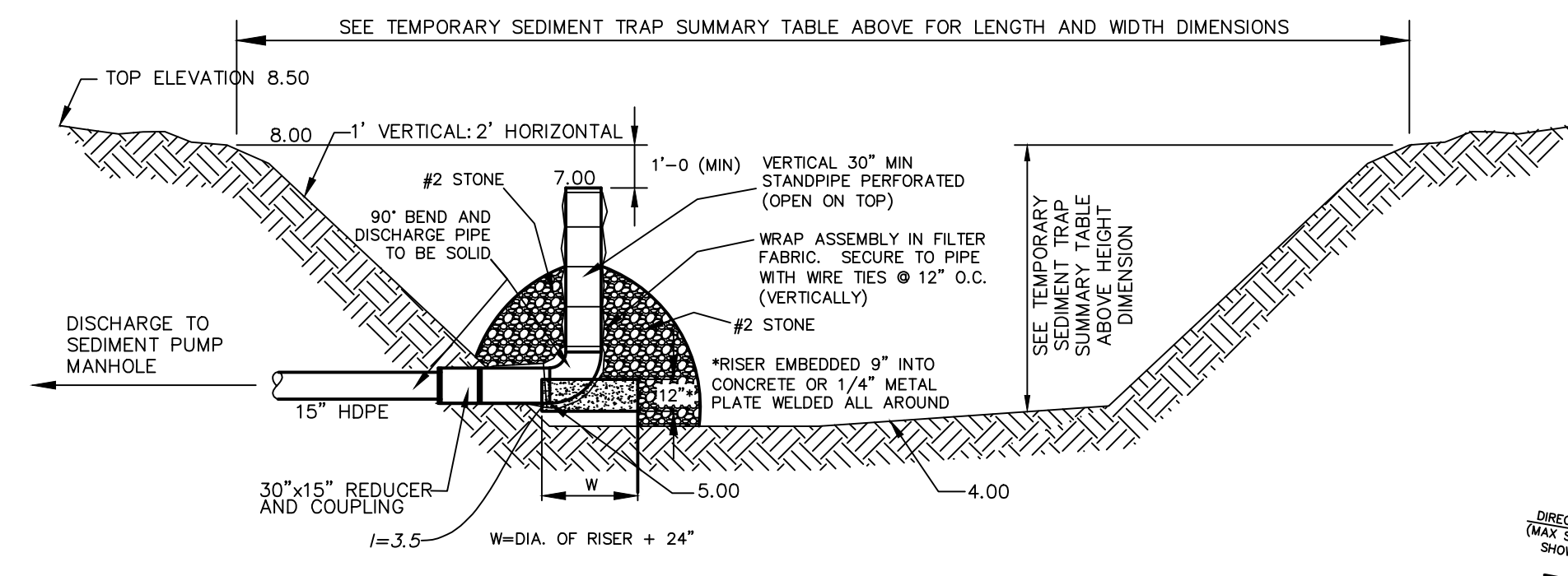
GROUND FLOOR STORM SEWER, SANITARY SEWER AND WATER SERVICE CONNECTIONS
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

FILE: 160052
SCALE: 1"=20'
DATE: 12/27/16
CHK: DRH
BY: AS
160052-3

C8



TEMPORARY SEDIMENT PUMP MH.
NOT TO SCALE
1/C9



LOCATION:
SEDIMENT TRAPS SHALL BE LOCATED SO THAT THEY CAN BE INSTALLED PRIOR TO GRADING OR FILLING IN THE DRAINAGE AREA THEY ARE TO PROTECT. TRAPS MUST NOT BE LOCATED ANY CLOSER THAN 20 FEET FROM A PROPOSED BUILDING FOUNDATION IF THE TRAP IS TO FUNCTION DURING BUILDING CONSTRUCTION. LOCATE TRAPS TO OBTAIN MAXIMUM STORAGE BENEFIT FROM THE TERRAIN AND FOR EASE OF CLEANOUT AND DISPOSAL OF THE TRAPPED SEDIMENT.

TRAP SIZE:
THE VOLUME OF A SEDIMENT TRAP AS MEASURED AT THE ELEVATION OF THE CREST OF THE OUTLET SHALL BE AT LEAST 97 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE VOLUME OF A CONSTRUCTED TRAP SHALL BE CALCULATED USING STANDARD MATHEMATICAL PROCEDURES. THE VOLUME OF A NATURAL SEDIMENT TRAP MAY BE APPROXIMATED BY THE EQUATION: VOLUME (CU.FT.) = 0.4 X SURFACE AREA (SQ.FT.) X MAXIMUM DEPTH (FT.). TRAP CLEANOUT SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO THE ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 OF THE DESIGN DEPTH OF THE TRAP. SEDIMENT REMOVED FROM THE TRAP SHALL BE DEPOSITED IN A PROTECTED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

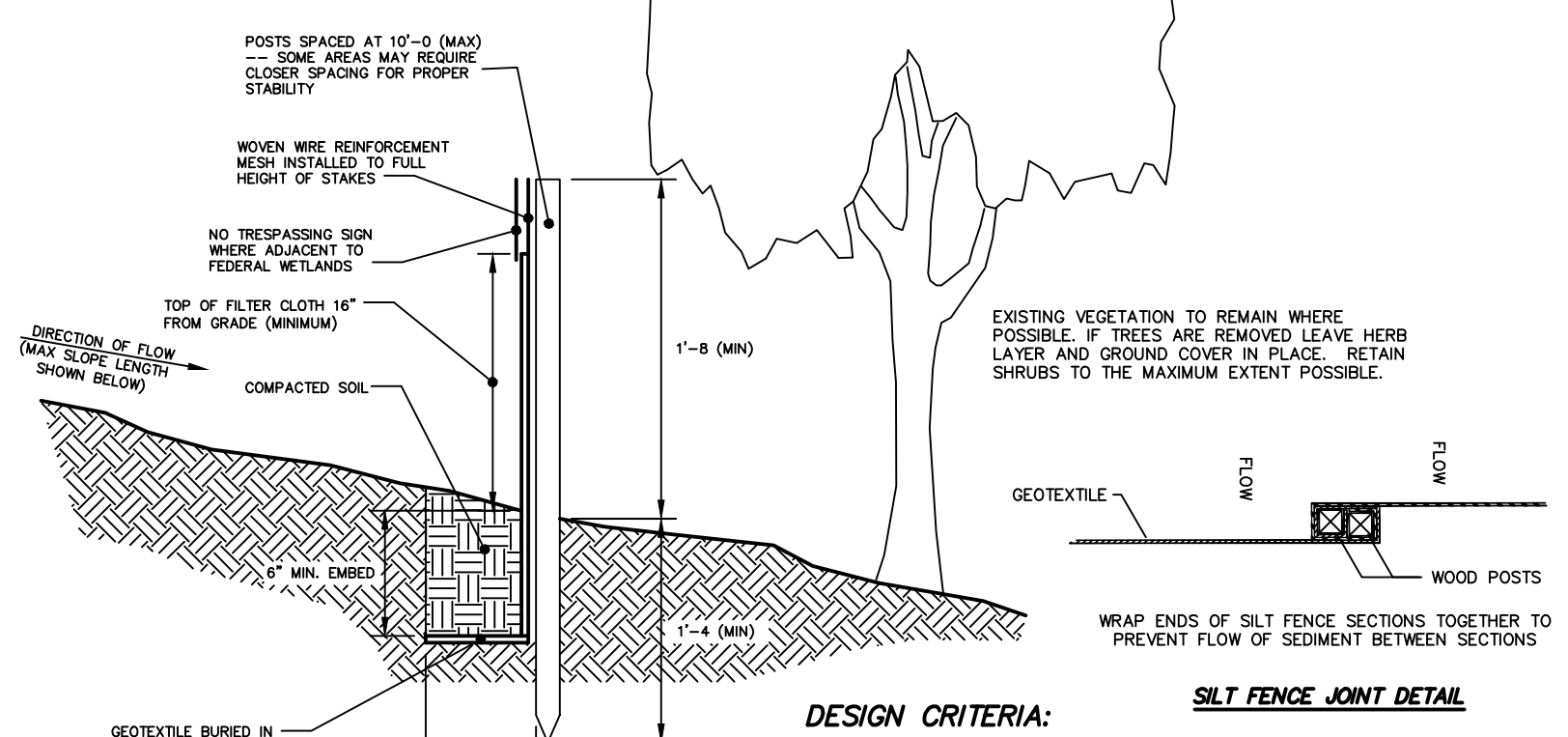
REQUIRED VOLUME = 2,967 C.F.
PROVIDED VOLUME = 6,886 C.F.

EMBANKMENT:
ALL EMBANKMENTS FOR SEDIMENT TRAPS SHALL NOT EXCEED FIVE (5) FEET IN HEIGHT AS MEASURED AT THE LOW POINT OF THE ORIGINAL GROUND ALONG THE CENTERLINE OF THE EMBANKMENT. EMBANKMENTS SHALL HAVE A MINIMUM FOUR (4) FOOT WIDE TOP AND SIDE SLOPES OF 2:1 OR FLATTER. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. THE EMBANKMENT SHALL BE STABILIZED WITH SEED AND MULCH AS SOON AS IT IS COMPLETED. THE ELEVATION OF THE TOP OF ANY DIRT DIRECTING WATER TO ANY SEDIMENT TRAP WILL EQUAL OR EXCEED THE MAXIMUM HEIGHT OF THE OUTLET STRUCTURE ALONG THE ENTIRE LENGTH OF THE TRAP.

EXCAVATION:
ALL EXCAVATION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMAL. EXCAVATED PORTIONS OF SEDIMENT TRAPS SHALL HAVE 1:1 OR FLATTER SLOPES.

TEMPORARY SEDIMENT TRAP SUMMARY TABLE	
DESCRIPTION	TRAP
TYPE	/
DRAINAGE AREA	1.64 ACRES
STORAGE REQ'D	2,967 C.F.
STORAGE PROVIDED*	6,886 C.F.
PIPE OUTLET	15"
DEPTH BELOW OUTLET EMBANKMENT H.T.	12"
	4.5'

*STORAGE CAPACITY FROM THE TOP ELEVATION OF THE RISER PIPE OUTLET TO THE TRAP BOTTOM



DESIGN CRITERIA:
DESIGN COMPUTATIONS ARE NOT REQUIRED FOR INSTALLATIONS OF 1 MONTH OR LESS. LONGER INSTALLATION PERIODS SHOULD BE DESIGNED FOR EXPECTED RUNOFF. ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE AREAS AS POSSIBLE, BUT AT LEAST 10 FEET FROM THE TOE OF A SLOPE TO ALLOW FOR MAINTENANCE AND ROLL DOWN THE AREA BEYOND THE FENCE MUST BE UNDISTURBED OR STABILIZED.

SENSITIVE AREAS TO BE PROTECTED BY SILT FENCE MAY NEED TO BE REINFORCED BY USING HEAVY WIRE FENCING FOR ADDED SUPPORT TO PREVENT COLLAPSE.

WHERE ENDS OF FILTER CLOTH COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.

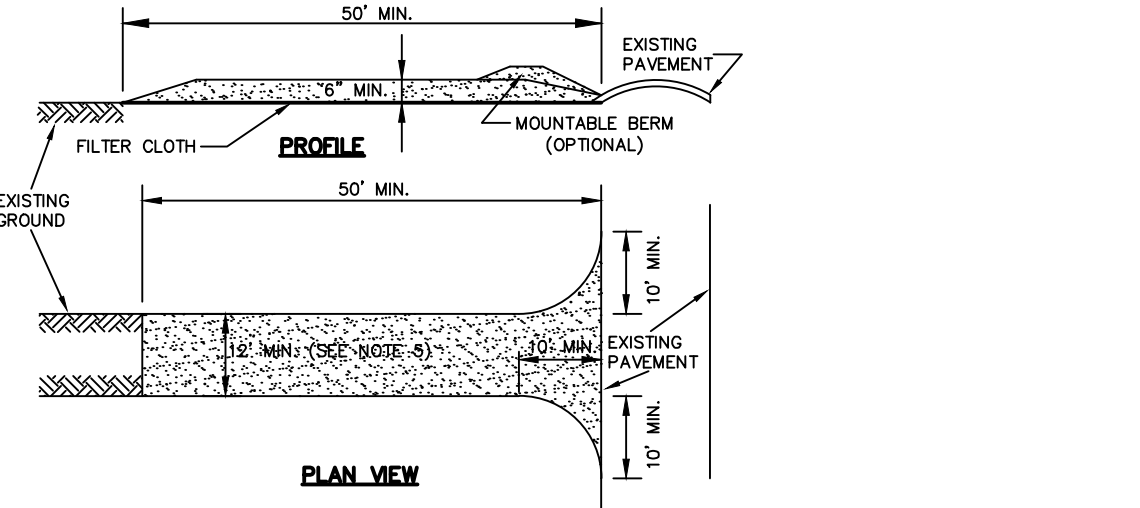
A DETAIL OF THE SILT FENCE SHALL BE SHOWN ON THE PLAN.

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE:

- INSTALL SILT FENCE IN ACCORDANCE WITH THE JULY 2016 "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".
- WOVEN WIRE FENCE SHALL BE 1/2" TO 3/4" GA., 6" MAXIMUM MESH OPENING, FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER SILT FENCE JOINT DETAIL ON THIS SHEET.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2" HEIGHT OF FILTER FABRIC) OR WHEN "BULGES" DEVELOP IN FENCING.

POSTS: STEEL EITHER 1" OR 1 1/2" TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 1/2" TO 3/4" GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, T140N OR APPROVED EQUAL.
PREFABRICATED UNIT: GEOTAB, ENVOFENCE, OR APPROVED EQUAL.

SEDIMENT CONTROL FENCE INSTALLATION DETAIL REQUIRED
NOT TO SCALE



TEMPORARY SEDIMENT TRAP DETAIL
NOT TO SCALE
2/C9

CONSTRUCTION SPECIFICATIONS:

- INSTALL CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE JULY 2016 "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".
- STONE SIZE - USE 1"-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN (6) INCHES.
- WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO LACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS ONTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

DESIGN CRITERIA:
AGGREGATE SIZE - USE A MATRIX OF 1"-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
THICKNESS - NOT LESS THAN SIX (6) INCHES.
WIDTH - 12-FOOT MINIMUM BUT NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS. 24-FOOT MINIMUM IF THERE IS ONLY ONE ACCESS TO THE SITE.
LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM WOULD APPLY).

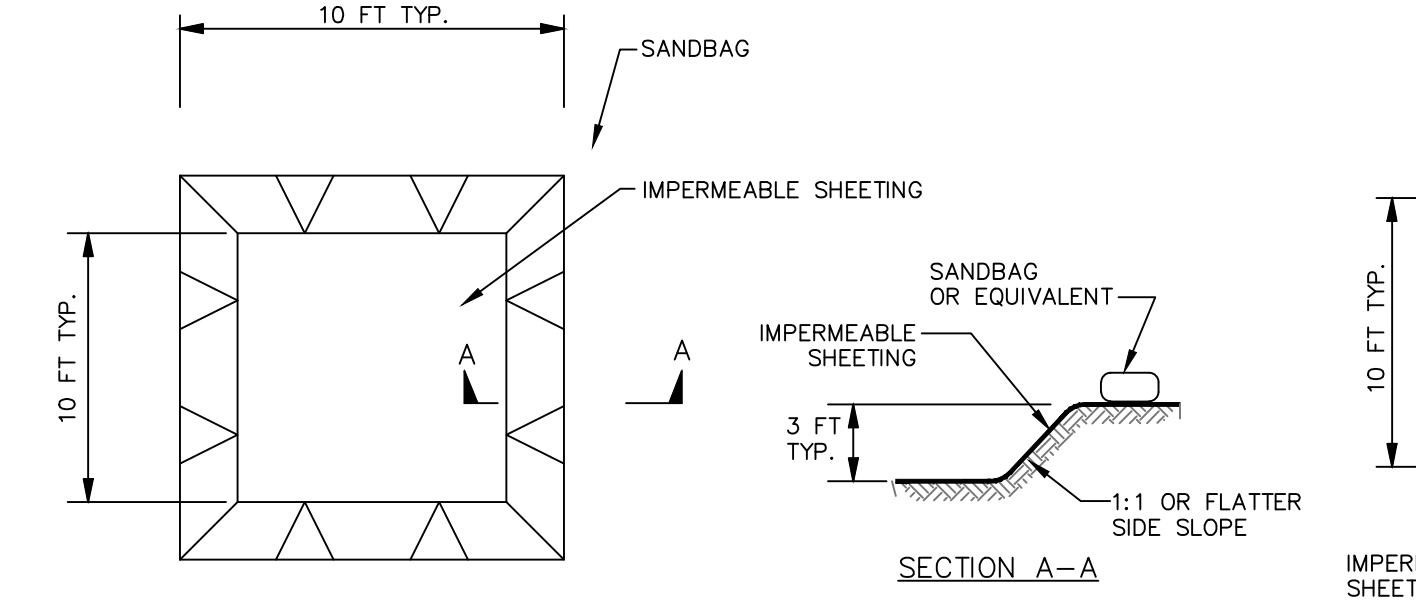
GEOTEXTILE - TO BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE-FAMILY RESIDENCE LOT. PIPING OF SURFACE WATER UNDER ENTRANCE SHALL BE PROVIDED AS REQUIRED. IF PIPING IS IMPOSSIBLE, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

CRITERIA FOR GEOTEXTILE - THE GEOTEXTILE SHALL BE WOVEN OR NONWOVEN FABRIC CONSISTING ONLY OF CONTINUOUS CHAIN POLYMERIC FILAMENTS OR YARNS OF POLYESTER. THE FABRIC MUST TO COMMONLY DISCONTINUED CHEMICALS: HYDRO-CARBONS, MULEX, ROT RESISTANT, AND CONFORM TO THE FABRIC PROPERTIES AS SHOWN:

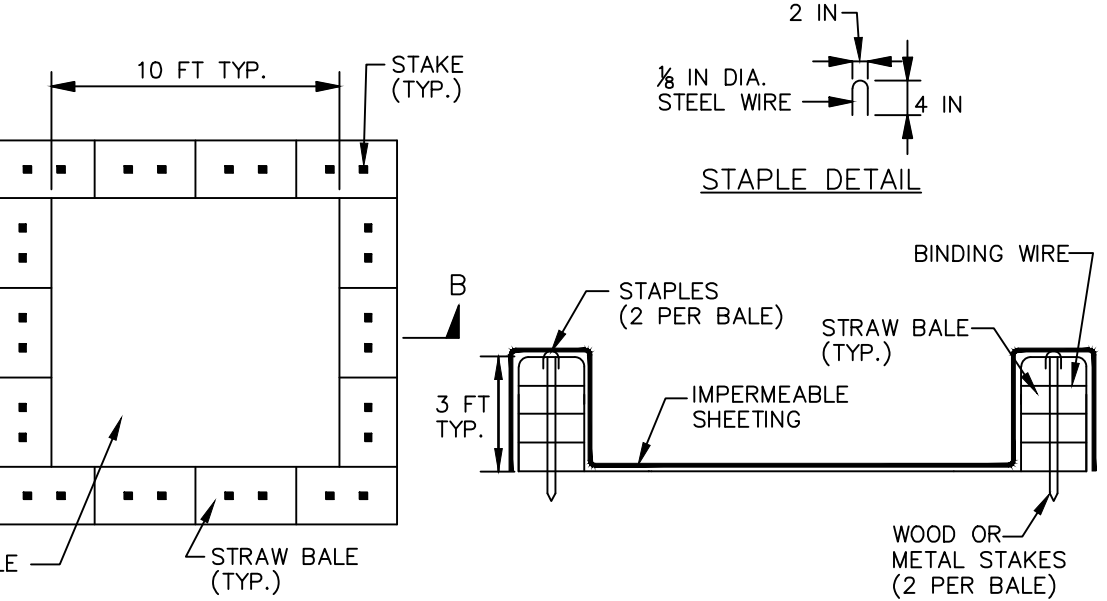
FABRIC PROPERTIES*	LIGHT DUTY ROADS GRADE-TO-GRADE ROUGH GRADES	HEAVY DUTY TRUCKS HAUL ROADS	TEST METHOD
TENSILE STRENGTH (LBS)	200	200	ASTM D1682
ELONGATION AT FAILURE (%)	190	450	ASTM D3786
MULLIN BURST STRENGTH (LBS)	40	125	ASTM D751
PUNCTURE STRENGTH (LBS)	40-80	40-80	US STD SEIVE EQUIVALENT
AGGREGATE OPENING SIZE	6	10	CW-02215

* LIGHT DUTY ROAD: AREA SITES THAT HAVE BEEN GRADED TO SUBGRADE AND WHERE MOST TRAVEL WOULD BE SINGLE AXLE VEHICLES AND AN OCCASIONAL MULTI-AXEL TRUCK. ACCEPTABLE MATERIALS ARE TREVIRA SPUNBOND 1115, MIRAAT 1000, TYRAN 340, OR EQUIVALENT.
* HEAVY DUTY ROAD: AREA SITES WITH ONLY ROUGH GRADING, AND WHERE MOST TRAVEL WOULD BE MULTI-AXEL VEHICLES. ACCEPTABLE MATERIALS ARE TREVIRA SPUNBOND 1115, MIRAAT 1000, TYRAN 340, OR EQUIVALENT.
* FABRICS NOT MEETING THESE SPECIFICATIONS MAY BE USED ONLY WHEN DESIGN PROCEDURE AND SUPPORTING DOCUMENTATION AREA SUPPLIED TO DETERMINE ADEQUATE DEPTH AND STRENGTH.

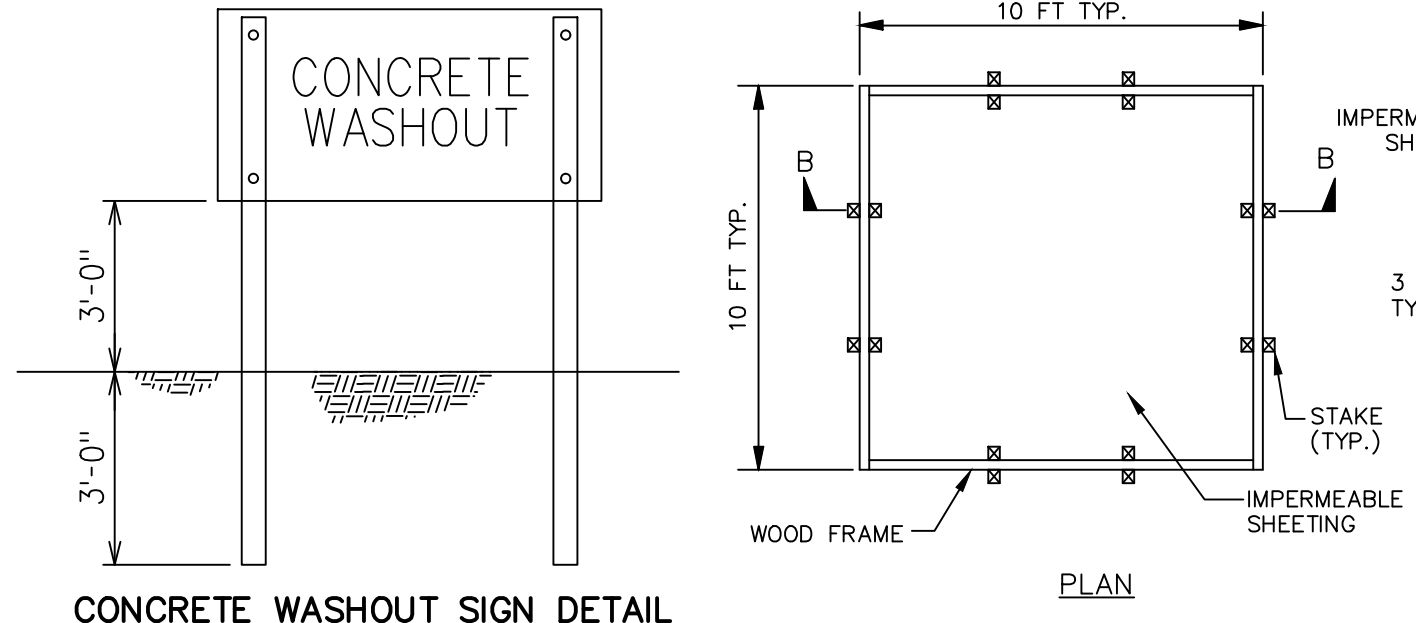
STABILIZED CONSTRUCTION ACCESS DETAIL
NOT TO SCALE
3/C9



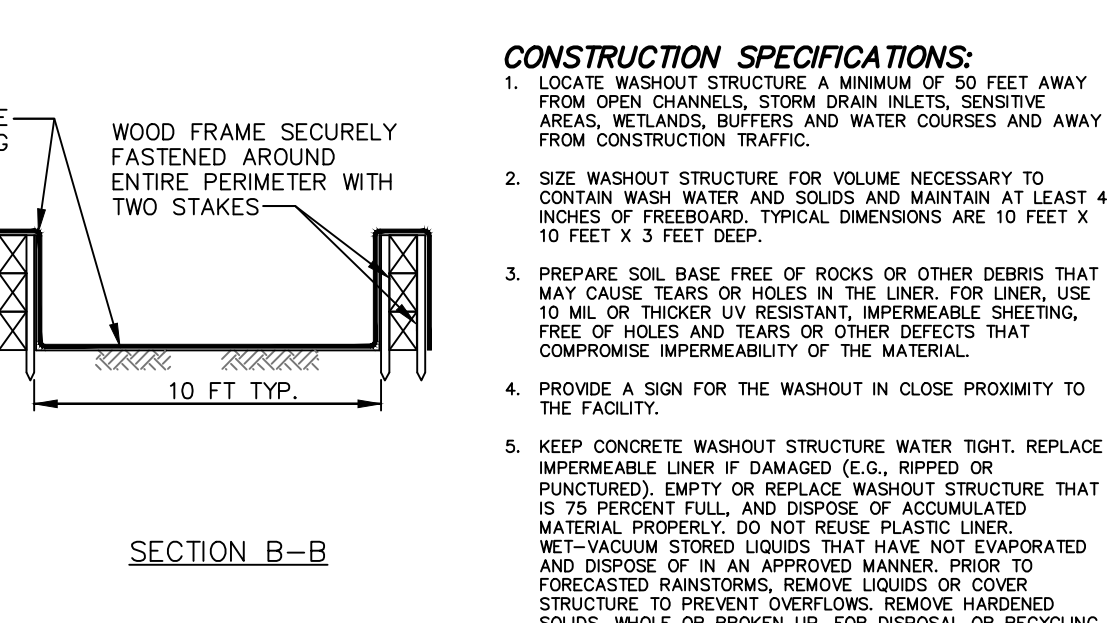
EXCAVATED WASHOUT STRUCTURE
PLAN



WASHOUT STRUCTURE WITH STRAW BALES
PLAN



WASHOUT STRUCTURE WITH WOOD PLANKS
PLAN

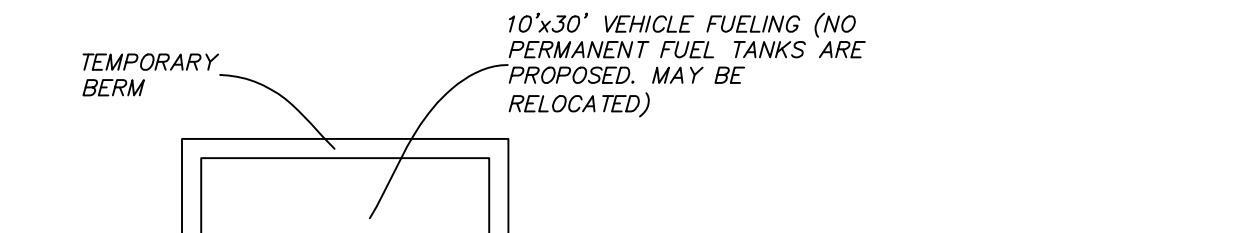


CONCRETE WASHOUT SIGN DETAIL
(OR EQUIVALENT)

ONSITE CONCRETE TRUCK WASHOUT STRUCTURE DETAIL
NOT TO SCALE
5/C9

CONSTRUCTION SPECIFICATIONS:

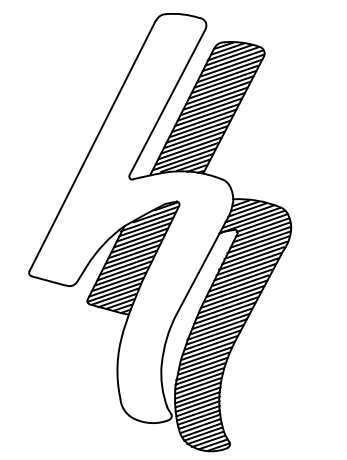
- LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
- SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
- PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
- PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
- KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL. PROTECT DO NOT REMOVE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, MUCKLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.



FUEL TANK AREA DETAIL
NOT TO SCALE
4/C9

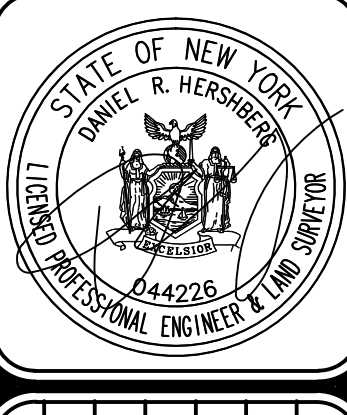
10'x30' VEHICLE FUELING (NO PERMANENT FUEL TANKS ARE PROPOSED, MAY BE RELOCATED)
TEMPORARY BERM

CONSTRUCTION ISSUE



HERSHBERG & HERSHBERG
Consulting Engineers and Land Surveyors
18 Locust Street
Albany, New York 12203

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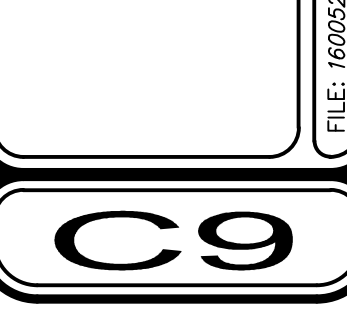


DATE	REMARKS
8/31/17 <td></td>	

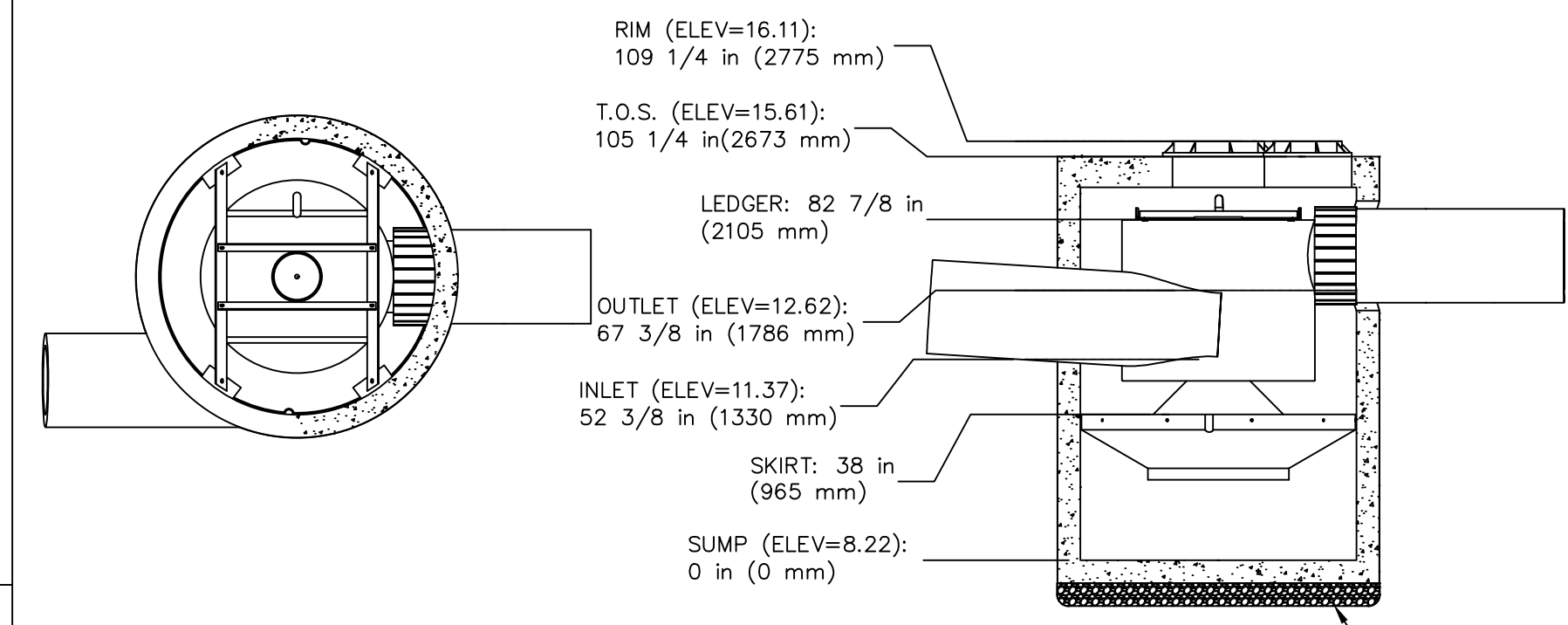
REVISIONS

DETAILS
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

SCALE: 1"=30'
DATE: 12/27/16
CHK: DBH
BY: AS
FILE: 160652



NOT FOR CONSTRUCTION - CONTACT HYDRO INTERNATIONAL FOR SITE SPECIFIC DRAWINGS



SEE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

CAPACITIES:
 1. Peak treatment flow: 8.0 cfs (227 l/s)
 2. Sediment storage capacity: 2.10 Cu. yd. (1.61 cu. m.)
 3. Oil storage capacity: 216 Gal. (818 liters)

ADDITIONAL DESIGN INFORMATION:
 1. The outlet pipe stub (not shown) is a roto-molded product with an I.D. of 18 in. that cannot be modified.
 To avoid the use of a reducer or expander on the outlet an 18 in. outlet pipe should be used if possible.
 The orientation of the outlet pipe can be adjusted to suit site conditions.
 2. Maximum pipe size is 18 in. The inlet pipe invert should be placed one inlet pipe diameter below the outlet pipe invert. The I.D. of the inlet pipe should be placed tangent to the I.D. of the manhole.
 The orientation of the inlet pipe can be adjusted to suit site conditions. Headloss at 8.0 cfs with an 18 in. inlet: 12 in. (305 mm). Headloss will increase with smaller inlet pipes.
 3. Sediment shall be stored in a zone that is isolated from the main flow path and protected from re-entrainment by the benching skirt.
 4. Dimensions are general and intended for guidance only.

Notes
 1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
 2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING DOWNSTREAM DEFENDER MANHOLE.
 3. TYPICALLY DOWNSTREAM DEFENDERS WILL BE DELIVERED TO THE PROJECT SITE WITH A TOP SLAB ELEVATION 12"± BELOW FINISHED GRADE. PURCHASER SHALL BE RESPONSIBLE FOR GRADE RINGS OR BLOCK AND MORTAR NECESSARY TO MEET FINAL GRADE.

B JLL 1/7/13 Metric Dim.
 Date Scale

Drawn	Checked	Approved
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Title
 6-FT (1.82m) DIAMETER DOWNSTREAM DEFENDER

Hydro International
 Stormwater Solutions
 94 Hutchins Drive
 Portland, Maine 04102
 Tel: (207) 756-6200
 Fax: (207) 756-6212
 stormwaterinquiry@hydro-int.com

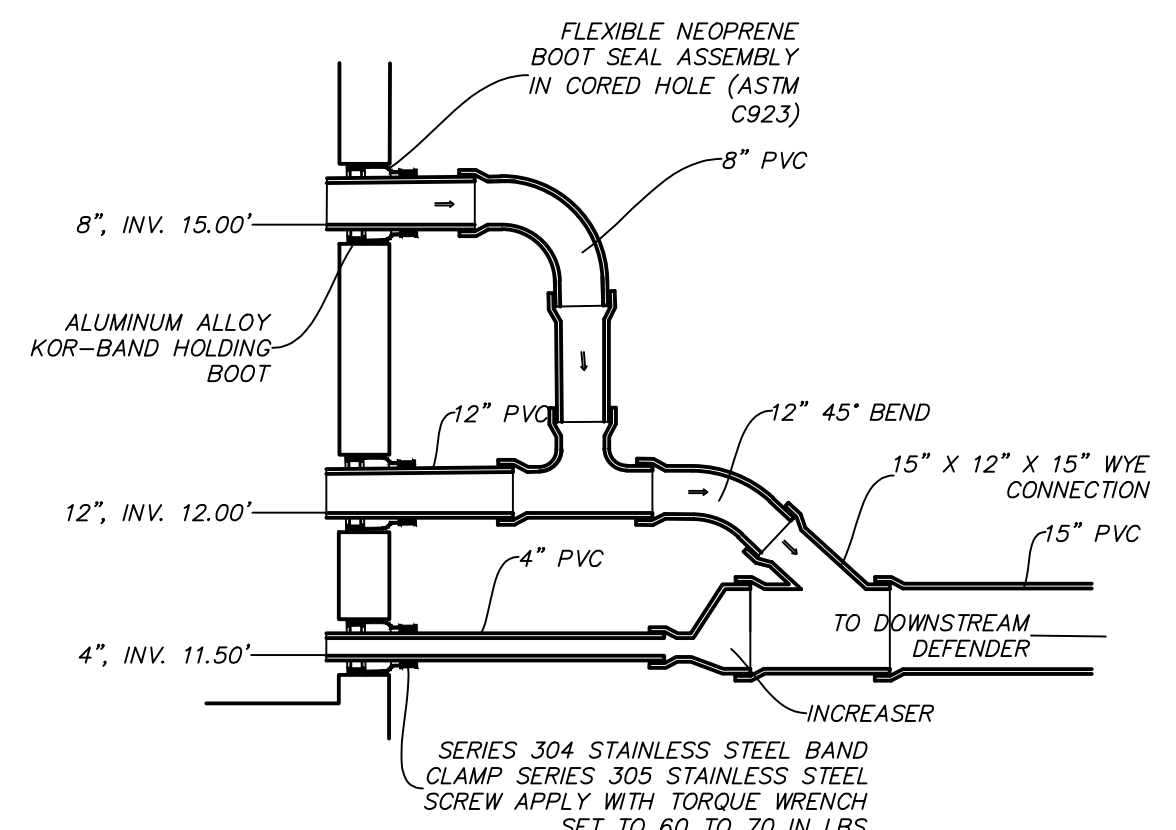
CAD Ref: D6GA
 Project No.
 Drawing No. D6GA Rev.

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1/C10 DOWNSTREAM DEFENDER DETAIL NOT TO SCALE

STREET OPENING PERMIT APPLICATION WATER DEPARTMENT GUIDELINES

- ALL WORK AFFECTING OR RELATING TO THE WATER SYSTEM* FACILITIES WILL COMPLY WITH ALL APPLICABLE WATER DEPARTMENT STANDARDS AND SPECIFICATIONS.
 - STREET OPENING PERMIT APPLICATION APPROVAL WILL NOT BE GRANTED UNTIL ALL APPLICABLE WATER DEPARTMENT FEES HAVE BEEN PAID AND ASSOCIATED PERMITS HAVE BEEN ISSUED.
 - ANY WORK AFFECTING WATER SYSTEM FACILITIES MUST BE INSPECTED AND APPROVED IN ITS ENTIRETY BY THE ALBANY WATER DEPARTMENT OR ITS DULY AUTHORIZED AGENTS PRIOR TO BACKFILLING. CONTRACTOR WILL GIVE A MINIMUM OF 48 HOURS NOTICE PRIOR TO INSPECTION.
 - THIS PROJECT IS DESIGNED FOR CLASS 1 FIRE PROTECTION SYSTEM AND COMPLIES WITH SECTION IV-F-1 OF THE CITY OF ALBANY RULES AND REGULATIONS FOR CROSS CONNECTION AND BACKFLOW PREVENTION. IF ANOTHER SYSTEM IS CONTEMPLATED IT MUST COMPLY WITH APPLICABLE REQUIREMENTS OF SADE REGULATIONS AND BE APPROVED BY THE CITY OF ALBANY DEPARTMENT OF WATER AND WATER SUPPLY.
- * WATER SYSTEM MEANS ALL PUBLIC AND PRIVATE UNDERGROUND POTABLE WATER FACILITIES AND APPURTENANCES LOCATED IN THE CITY OF ALBANY OR ON WATER BOARD PROPERTY OR R.O.W..

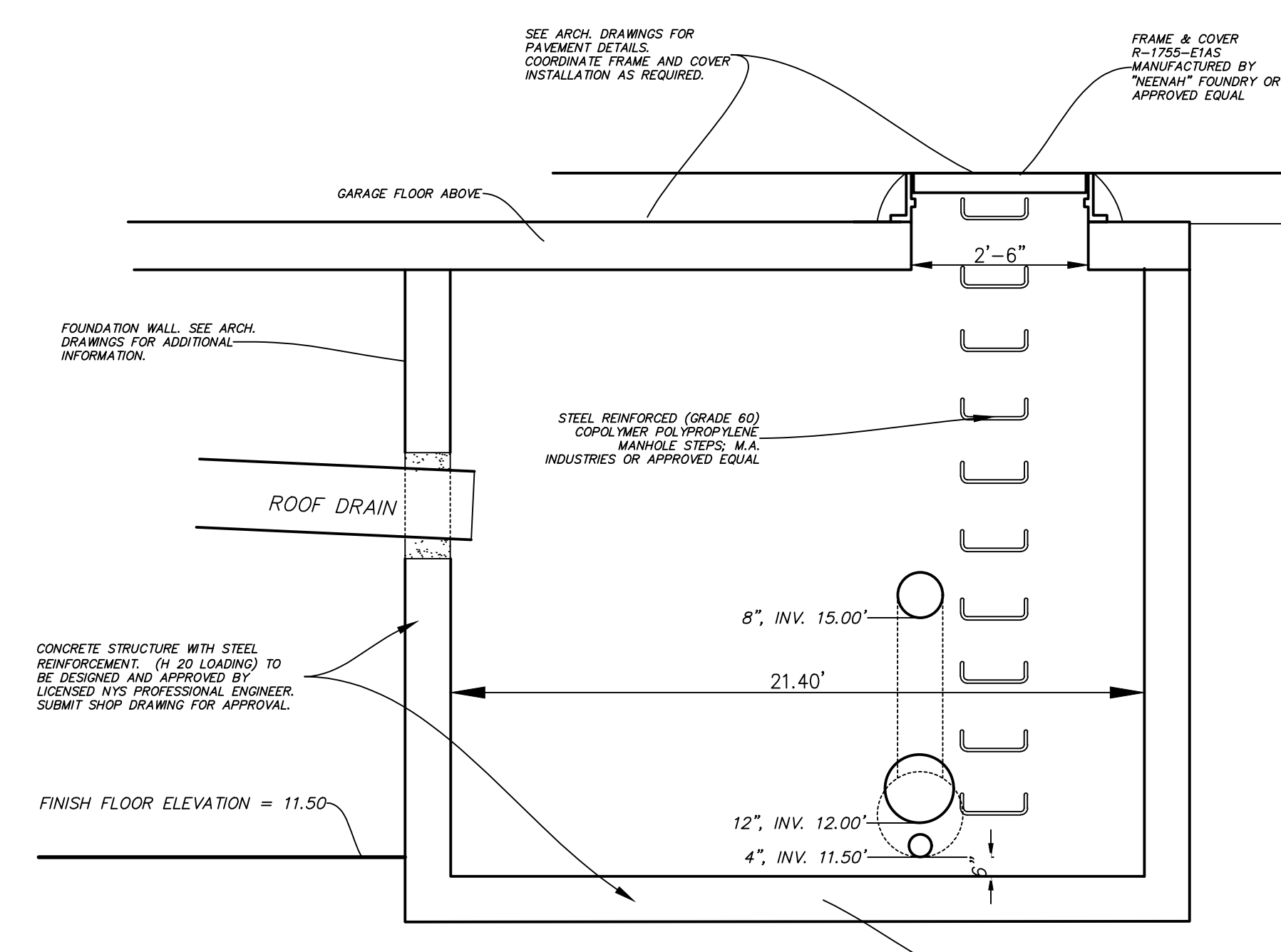


3/C10 OUTFALL MANIFOLD DETAIL NOT TO SCALE



NOTE:
 INSTALL "Oldcastle FlipGard" CATCH BASIN INSERT. SUBMIT SHOPDRAWING FOR APPROVAL PRIOR TO INSTALLATION.

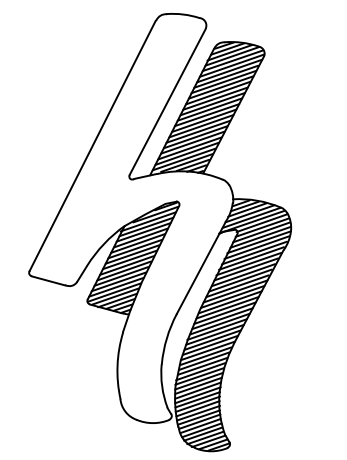
2/C10 STORM DRAIN INLET PROTECTION NOT TO SCALE



NOTE:
 SEE DETENTION STRUCTURE DIMENSIONS ON SHEET C6. PROVIDE MINIMUM FLOOR AREA OF 5.35 S.F.

4/C10 DETENTION STRUCTURE DETAIL NOT TO SCALE

CONSTRUCTION ISSUE



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 18 Locust Street
 Albany, New York 12203

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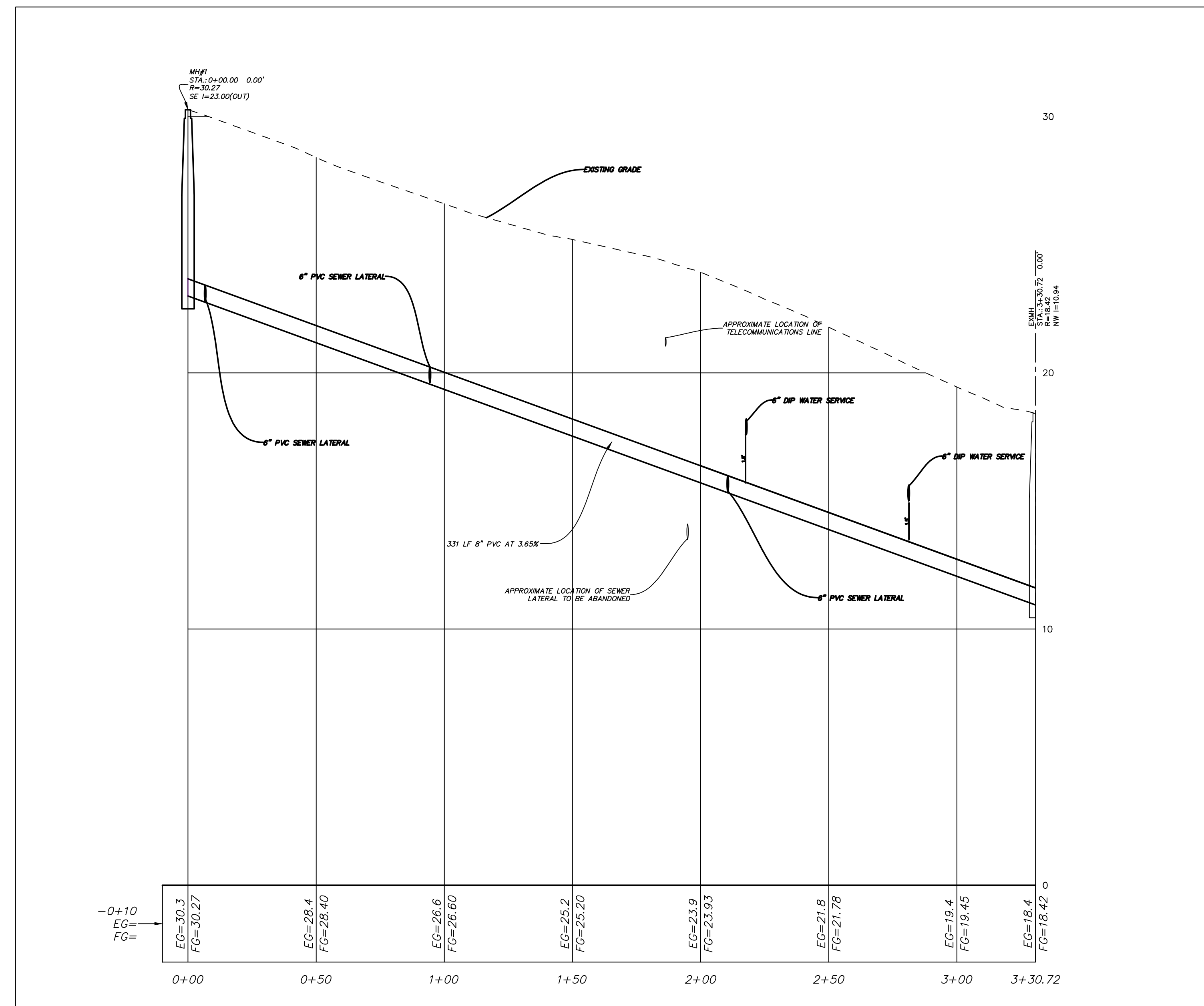
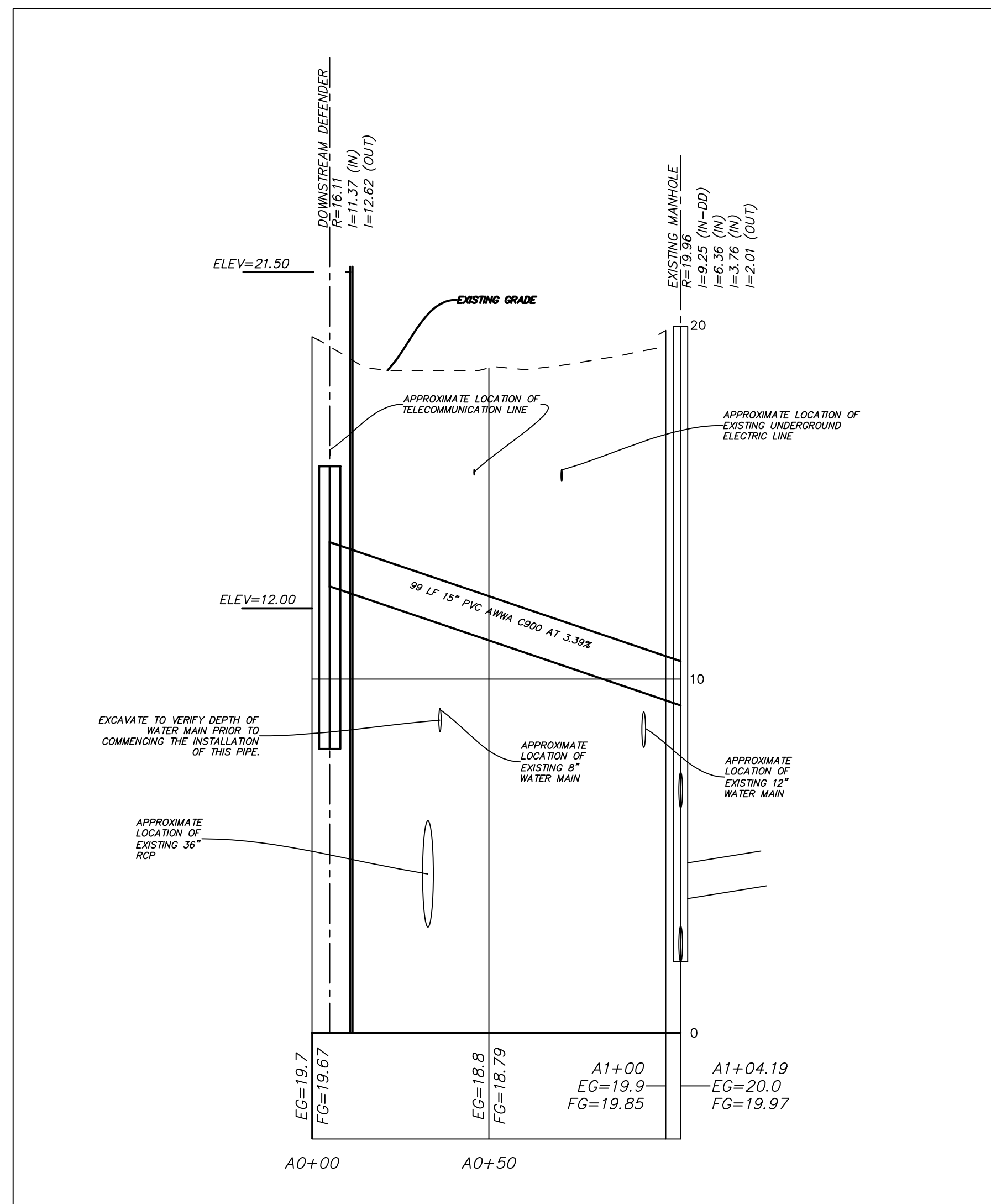
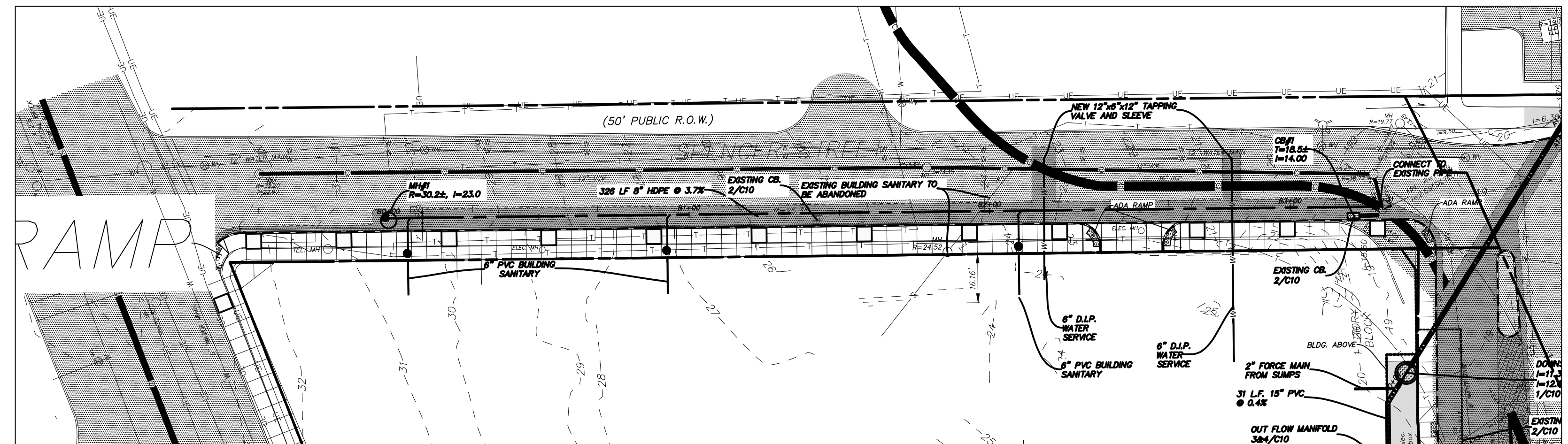
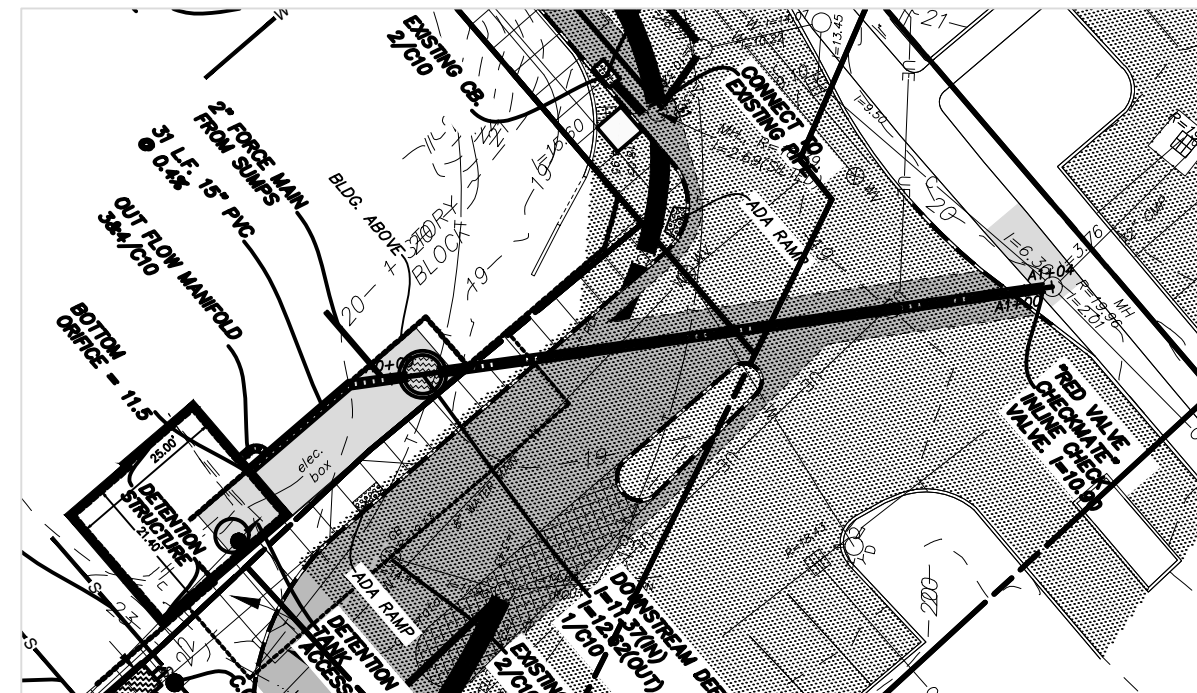


DATE	REVISIONS
8/31/17	COMMENTS LETTER
9/7/17	COMMENTS LETTER
9/15/17	DOWNSTREAM DEFENDER UPDATED

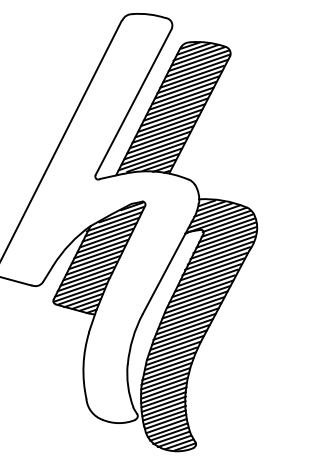
DETAILS
 QUACKENBUSH SQUARE
 705 BROADWAY
 ALBANY, NY

DATE: 12/27/16
 CHK: DRH
 BY: AS
 SCALE: 1"=30"
 FILE: 160952





CONSTRUCTION ISSUE

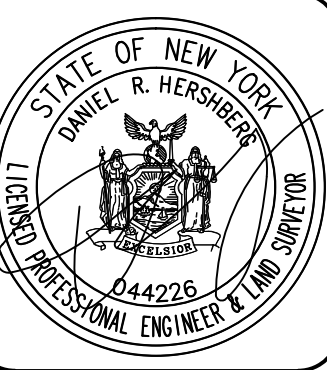


HERSHBERG & HERSHBERG

Consulting Engineers and Land Surveyors

18 Locust Street
Albany, New York 12203

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DATE	REMARKS
9/15/17	STORM SEWER UPDATED
10/11/17	RED VALVE CHECKMATE IN-LINE CHECK VALVE

PROFILES FOR
QUACKENBUSH SQUARE
705 BROADWAY
ALBANY, NY

DATE: 9/14/17
CHK: DRH
BY: MLW
SCALE: AS NOTED
FILE: 160052

C11