

REAL NOTES

THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, PROJECT SPECIFICATIONS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, THE CITY OF DES PLAINES, THE METROPOLITAN WATER RECLAMATION DISTRICT, ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ORDINANCES THERE TO SHALL GOVERN THIS WORK.

THE STANDARD SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.

NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION". PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. Failing to secure such instruction, the contractor will be considered to have proceeded at his own risk and expense. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER OR HIS REPRESENTATIVES. FINAL PAYMENT WILL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.

WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF OUTFALLS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO REFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

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

DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER AND HE CITY.

SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

INTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY DRAINAGE OR LANDSCAPING TO EXISTING CONDITIONS. CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

IF CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ARCHITECT, THE ENGINEER, THE CITY OF DES PLAINES AND THEIR AGENTS FROM ALL LIABILITY INVOLVED IN THE INSTRUCTION, INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT.

IF CONTRACTOR MUST CARRY INSURANCE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND MUST PRESENT A B-SPECIFIC CERTIFICATE OF INSURANCE, NAMING ALL OFFICIALS AND EMPLOYEES OF THE CITY AND THE ENGINEER, AS ADDITIONAL INSURED.

SENT UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY LINES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE INFORMATION OF THE CONTRACTOR. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE LOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. HE SHALL ALSO ADVISE FROM THE RESPECTIVE UTILITY COMPANIES, JULIE. ALL INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES. IF THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR USING THEM.

CITY OF DES PLAINES SHOULD BE CONTACTED 48 HOURS PRIOR TO THE RT. OF ANY EXCAVATION 847-391-5300.

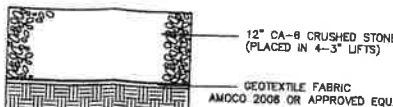
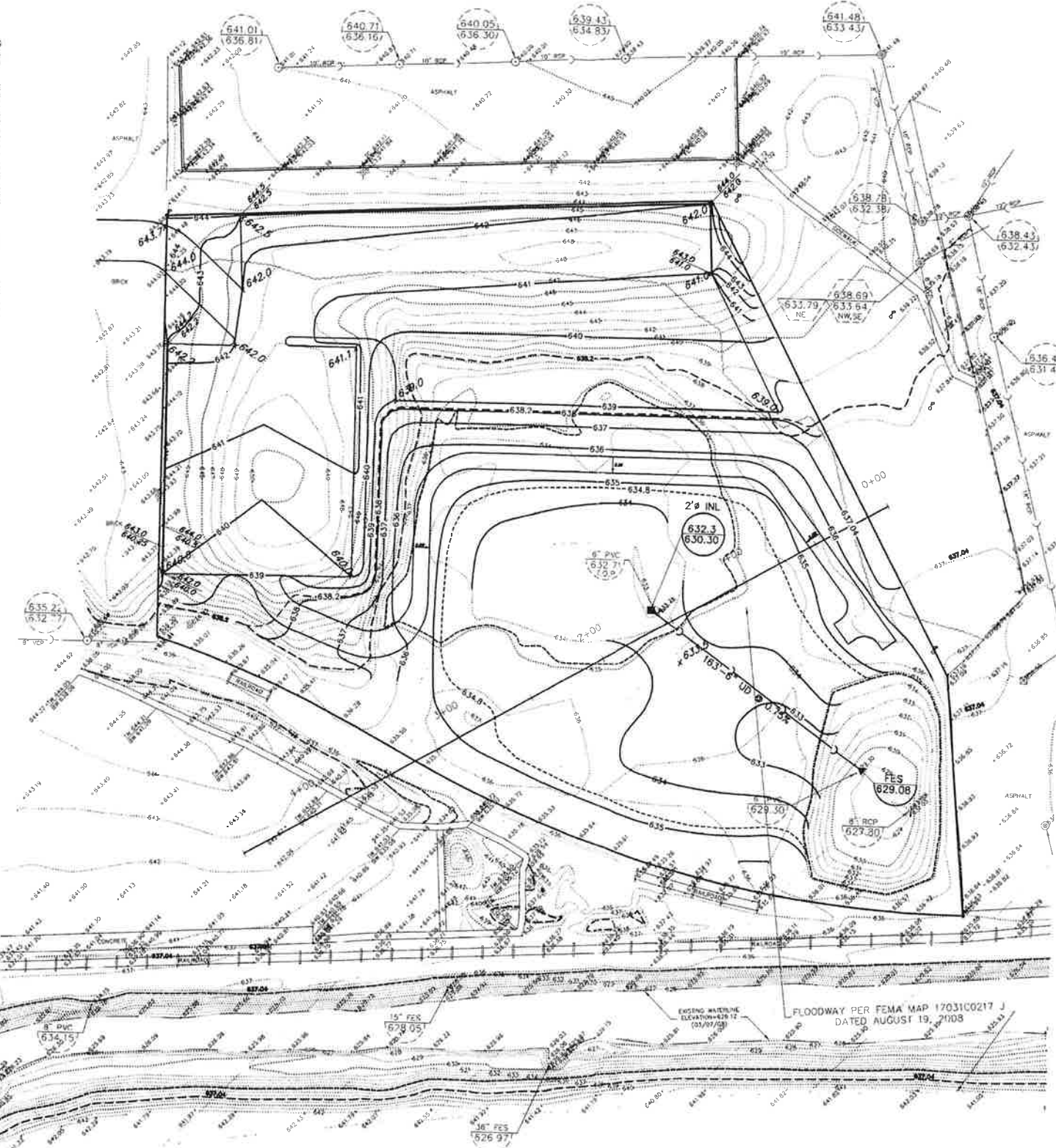
REGATE SPECIFIED ON THESE PLANS SHALL BE CONSIDERED CRUSHED STONE. THE GRADATION SPECIFIED. CRUSHED CONCRETE MAY NOT BE SUBSTITUTED CRUSHED STONE, UNLESS APPROVED BY THE ENGINEER.

WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE TRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF AL ACCEPTANCE OF THE WORK BY THE OWNER AGAINST ALL DEFECTS IN TRAILS AND WORKMANSHIP OF WHATEVER NATURE.

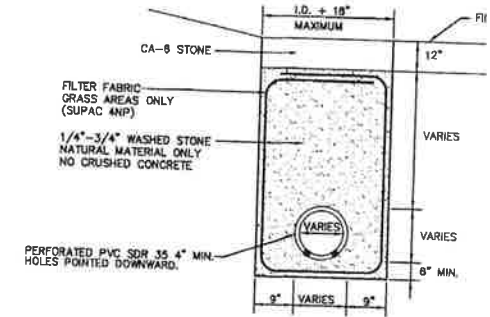
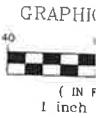
MENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES IN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO LABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION. DAMAGE DUE TO CONSTRUCTION OPERATIONS, IF EXISTING UTILITY LINES OF NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW INICTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE LCT MAY BE RESOLVED.

VED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE DISPOSED OF IE AT LOCATIONS PROVIDED BY THE CONTRACTOR AT HIS EXPENSE.

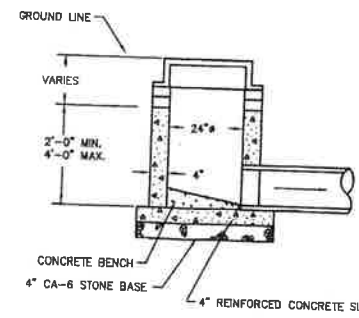
4STURBED AREAS NOT TO HAVE STONE PLACED SHALL HAVE 6-INCHES OF XL PLACED AND SEDED.



PAVEMENT DETAIL



UNDERDRAIN DETAIL



INLET

- NOTES:
1. PIPE OPENINGS TO BE PRECAST INTO WALLS.
 2. PRECAST REINFORCED CONCRETE SECTIONS WITH PREFORMED BITUMINOUS JOINTS AND INTEGRAL PRECAST BOTTOMS.
 3. FRAME TO BE LAID IN 3/4\"
 4. ADJUSTING RINGS NOT TO EXCEED 8\"
 5. NEENAH R-4340-B ROUND BEDDING GRATE IN GRASS AREAS.
 6. INLETS IN PAVEMENT AREAS SHALL BE NEENAH R-2015-D.
 7. TWO 10' LONG 4\"

YEAR BFE - 638.2
YEAR BFE - 634.8
NAVD 1988 DATUM

GEWALT HAMILTON
ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
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SITE PLAN\GENERAL NOTES\DETAILS

DES PLAINES YARD EXPANSION SITE
AMERICAN BRICK PAVING INC.
CITY OF DES PLAINES, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION
2	KAJ	7/17/09	REVISE PER UPDATED FEMA INFORMATION				
1	KAJ	7/23/08	REVISE STORAGE GRADING PER CITY REVIEW				

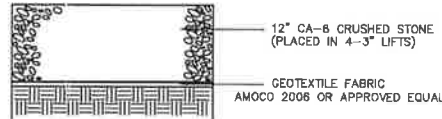
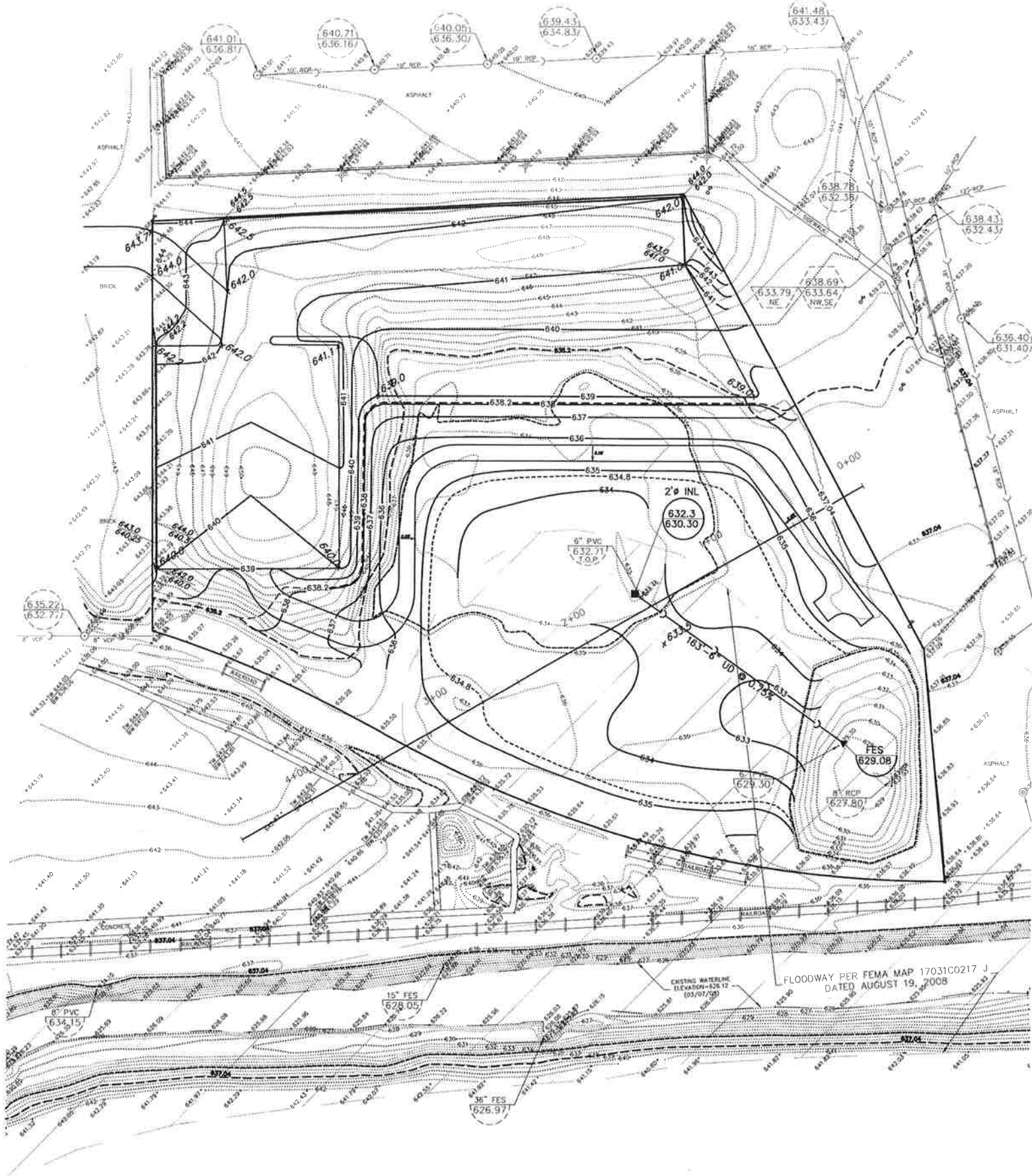
FILE: 4006-200-P&Z.DWG	DRAWN BY: VB	GHA PROJECT #
DATE: 03/12/08		4006-200
CHECKED BY: MMH	SCALE:	
DATE: 03/13/08	1"=40'	



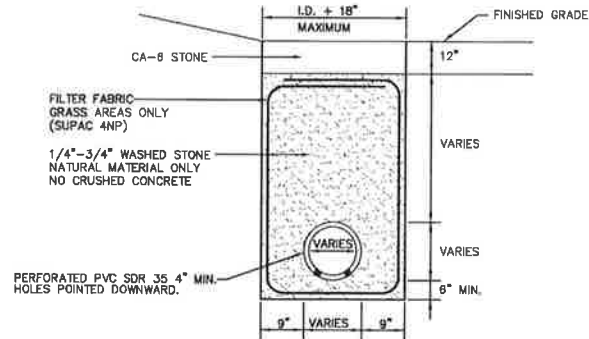
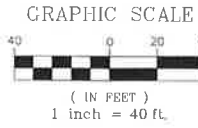
FEMA Flood Plain Map

GENERAL NOTES

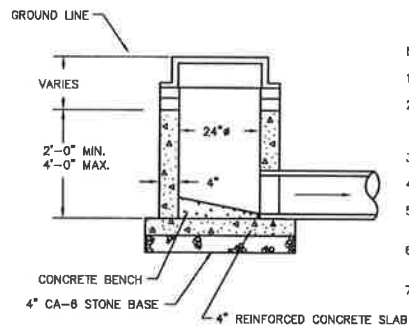
- A-1. THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, PROJECT SPECIFICATIONS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, THE CITY OF DES PLAINES, THE METROPOLITAN WATER RECLAMATION DISTRICT, ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERETO SHALL GOVERN THIS WORK.
- A-2. THE STANDARD SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.
- A-3. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED FOR CONSTRUCTION. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADES, IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS. THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- A-4. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER OR HIS REPRESENTATIVES. FINAL PAYMENT WILL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.
- A-5. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC., SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
- A-6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.
- A-7. WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT, THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- A-8. DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL ENSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER AND THE CITY.
- A-9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM HIS CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- A-10. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.
- A-11. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ARCHITECT, THE ENGINEER, THE CITY OF DES PLAINES AND THEIR AGENTS, FROM ALL LIABILITY INVOLVED IN THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT.
- A-12. THE CONTRACTOR MUST CARRY INSURANCE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND MUST PRESENT A JOB-SPECIFIC CERTIFICATE OF INSURANCE, NAMING ALL OFFICIALS AND EMPLOYEES OF THE CITY AND THE ENGINEER, AS ADDITIONAL INSURED.
- A-13. EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES, JULIE, DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THEM.
- A-14. THE CITY OF DES PLAINES SHOULD BE CONTACTED 48 HOURS PRIOR TO THE START OF ANY EXCAVATION, 847-391-5300.
- A-15. AGGREGATE SPECIFIED ON THESE PLANS SHALL BE CONSIDERED CRUSHED STONE MEETING THE GRADATION SPECIFIED. CRUSHED CONCRETE MAY NOT BE SUBSTITUTED FOR CRUSHED STONE, UNLESS APPROVED BY THE ENGINEER.
- A-16. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF INITIAL ACCEPTANCE OF THE WORK BY THE OWNER AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE.
- A-17. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- A-18. REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE DISPOSED OF OFFSITE AT LOCATIONS PROVIDED BY THE CONTRACTOR AT HIS EXPENSE.
- A-19. ALL DISTURBED AREAS NOT TO HAVE STONE PLACED SHALL HAVE 6-INCHES OF TOPSOIL PLACED AND SEED.



PAVEMENT DETAIL



UNDERDRAIN DETAIL



INLET

- NOTES:
- PIPE OPENINGS TO BE PRECAST INTO WALLS.
 - PRECAST REINFORCED CONCRETE SECTIONS WITH PREFORMED BITUMINOUS JOINTS AND INTEGRAL PRECAST BOTTOMS.
 - FRAME TO BE LAID IN 3/4\" MASTIC BED.
 - ADJUSTING RINGS NOT TO EXCEED 8\".
 - NEENAH R-4340-B ROUND BEEHIVE GRATE IN GRASS AREAS.
 - INLETS IN PAVEMENT AREAS SHALL BE NEENAH R-2015-D.
 - TWO 10' LONG 4\" PERFORATED PVC SDR 35 FINGER DRAINS REQUIRED IN ALL PROPOSED PAVEMENT AREAS. SEE FINGER DRAIN DETAIL.

100 YEAR BFE - 638.2
10 YEAR BFE - 634.8
NAVD 1988 DATUM

GEWALT HAMILTON
ASSOCIATES, INC.

CONSULTING ENGINEERS & SURVEYORS
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SITE PLAN\GENERAL NOTES\DETAILS

DES PLAINES YARD EXPANSION SITE
AMERICAN BRICK PAVING INC.
CITY OF DES PLAINES, ILLINOIS

NO.	BY	DATE	REVISION
2	KAJ	7/7/09	REVISE PER UPDATED FEMA INFORMATION
1	KAJ	7/29/08	REVISE STORAGE GRADING PER CITY REVIEW

NO.	BY	DATE	REVISION

FILE: 4006.200-PR2.DWG	SHEET NUMBER
DRAWN BY: VB DATE: 03/12/08	GHA PROJECT # 4006.200
CHECKED BY: MMH DATE: 03/13/08	SCALE: 1\" = 40'

2
OF 4 SHEETS



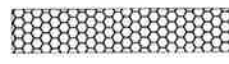
0-10 YEAR FLOODPLAIN FILL



10-100 YEAR FLOODPLAIN FILL

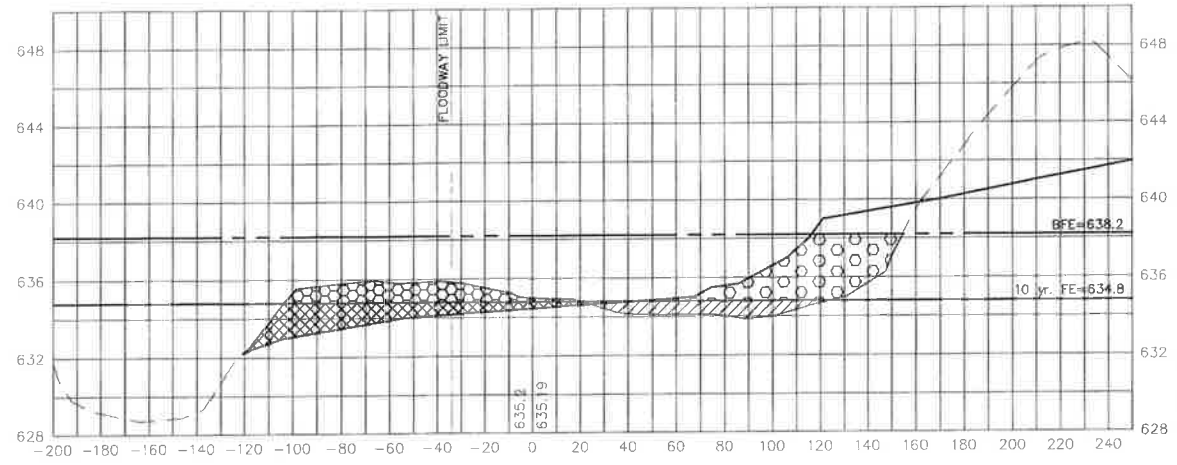


0-10 YEAR FLOODPLAIN CUT



10-100 YEAR FLOODPLAIN CUT

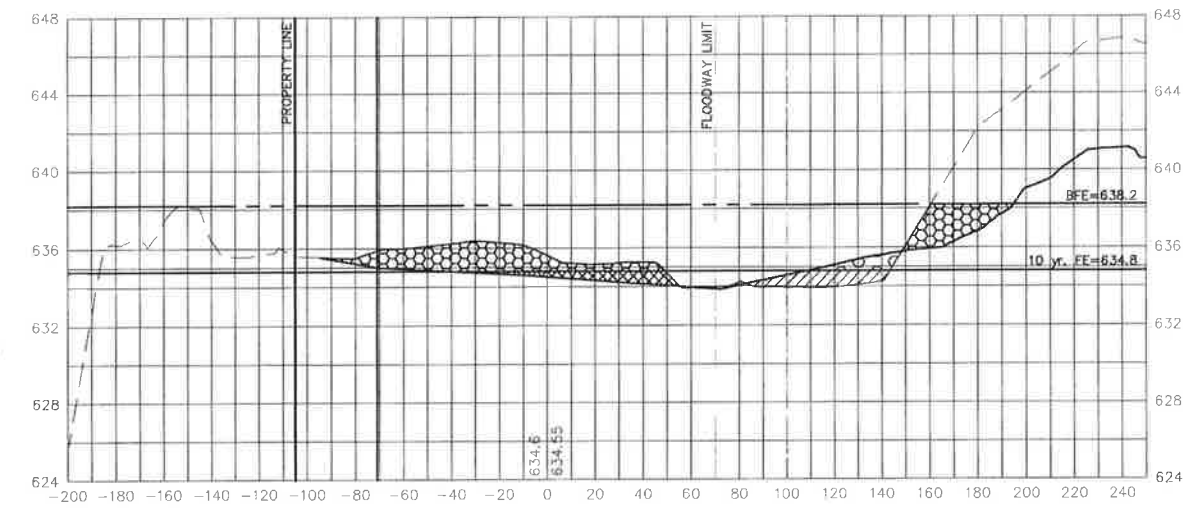
1+00



TABLE

FLOODPLAIN LOST 10-100 YR.	= 172.32 SF.
FLOODPLAIN LOST 0-10 YR.	= 60.80 SF.
COMP STORAGE 10-100 YR.	= 90.45 SF.
COMP STORAGE 0-10 YR.	= 115.80 SF.

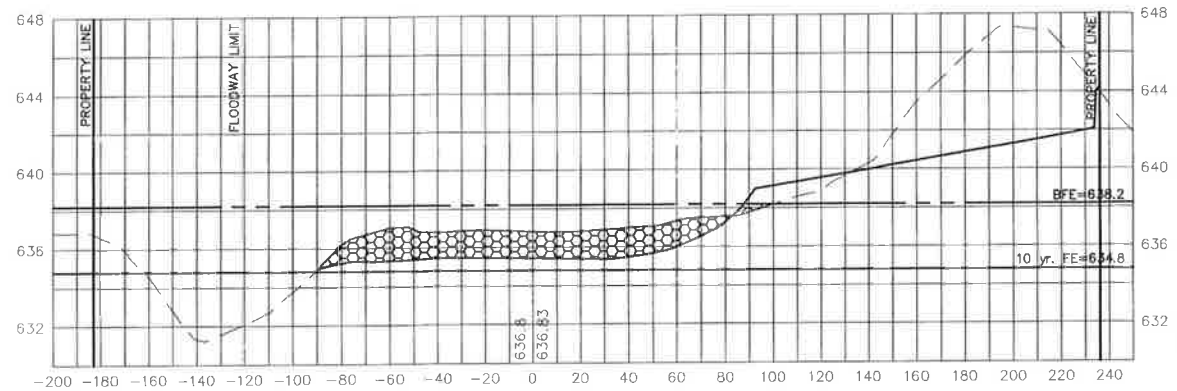
2+50



TABLE

FLOODPLAIN LOST 10-100 YR.	= 18.51 SF.
FLOODPLAIN LOST 0-10 YR.	= 38.84 SF.
COMP STORAGE 10-100 YR.	= 181.02 SF.
COMP STORAGE 0-10 YR.	= 34.66 SF.

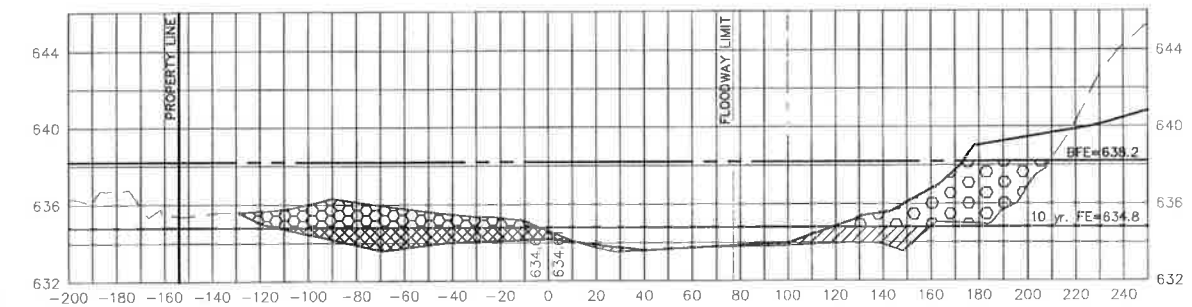
0+50



TABLE

FLOODPLAIN LOST 10-100 YR.	= 4.32 SF.
FLOODPLAIN LOST 0-10 YR.	= 0.00 SF.
COMP STORAGE 10-100 YR.	= 226.50 SF.
COMP STORAGE 0-10 YR.	= 0.00 SF.

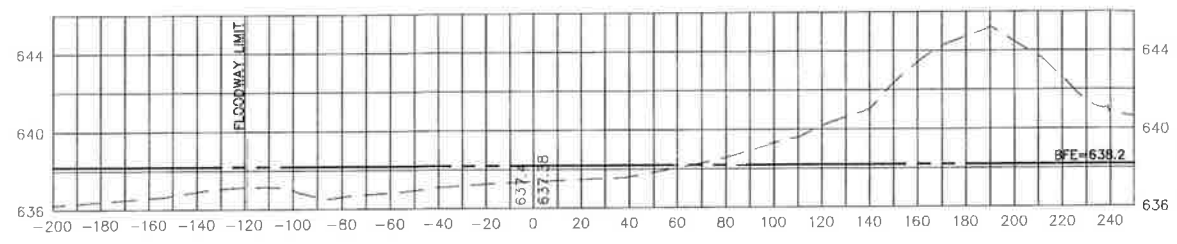
2+00



TABLE

FLOODPLAIN LOST 10-100 YR.	= 146.59 SF.
FLOODPLAIN LOST 0-10 YR.	= 50.77 SF.
COMP STORAGE 10-100 YR.	= 106.24 SF.
COMP STORAGE 0-10 YR.	= 84.82 SF.

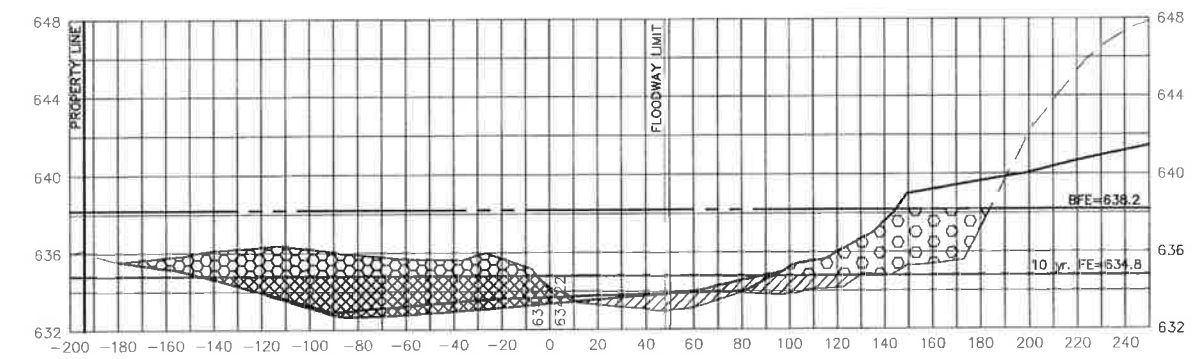
0+00



TABLE

FLOODPLAIN LOST 10-100 YR.	= 0.00 SF.
FLOODPLAIN LOST 0-10 YR.	= 0.00 SF.
COMP STORAGE 10-100 YR.	= 0.00 SF.
COMP STORAGE 0-10 YR.	= 0.00 SF.

1+50



TABLE

FLOODPLAIN LOST 10-100 YR.	= 164.41 SF.
FLOODPLAIN LOST 0-10 YR.	= 79.86 SF.
COMP STORAGE 10-100 YR.	= 173.66 SF.
COMP STORAGE 0-10 YR.	= 222.48 SF.

GEWALT HAMILTON
ASSOCIATES, INC.

CONSULTING ENGINEERS & SURVEYORS
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CROSS-SECTIONS

DES PLAINES YARD EXPANSION SITE
AMERICAN BRICK PAVING INC.
CITY OF DES PLAINES, ILLINOIS

										FILE: 4006.200-PR2.DWG		SHEET NUMBER: 3	
										DRAWN BY: VB			
										DATE: 03/12/08			
										CHECKED BY: MMH		SCALE:	
										DATE: 03/13/08		1"=40'	
												OF 4 SHEETS	

Figure 1 is a cross-section profile of a road and its drainage system. The profile shows the road surface (solid line), the existing ground (dashed line), and the proposed drainage system (dotted line). The road is 10 feet wide, with a 5-foot shoulder on each side. The drainage system is a 10-foot wide ditch with a 5-foot shoulder on each side. The ditch is located 10 feet from the right edge of the road. The profile is labeled with "FLOODWAY LIMIT", "PROPERTY LINE", and "10 yr. FE=634.8". The elevation scale on the right ranges from 624 to 644 feet.

FLOODPLAIN LOST 10-100 YR. = 0.86 SF.
FLOODPLAIN LOST 0-10 YR. = 0.00 SF.
COMP STORAGE 10-100 YR. = 0.00 SF.
COMP STORAGE 0-10 YR. = 0.00 SF.

FLOODPLAIN LOST 10-100 YR. = 0.00 SF.
FLOODPLAIN LOST 0-10 YR. = 0.00 SF.
COMP STORAGE 10-100 YR. = 35.56 SF.
COMP STORAGE 0-10 YR. = 0.00 SF.

FLOODPLAIN LOST 10-100 YR. = 34.92 SF.
FLOODPLAIN LOST 0-10 YR. = 4.27 SF.
COMP STORAGE 10-100 YR. = 106.62 SF.
COMP STORAGE 0-10 YR. = 0.00 SF.

VOLUME CALCULATIONS FOR
FILL IN FLOODPLAIN 0-10 YR

SECTION	AREA SF.	AVG. AREA SF.	DIST. FT.	VOL. CF.	TOTAL VOL CF.
0+00	0.00	0.00	50	0.00	0.00
0+50	0.00	30.40	50	1,520.00	1,520.00
1+00	60.90	70.33	50	3,516.50	5,036.50
1+50	79.96	65.32	50	3,265.75	8,302.25
2+00	50.77	44.81	50	2,240.25	10,542.50
2+50	38.84	21.66	50	1,077.75	11,620.25
3+00	4.27	2.14	50	106.75	11,727.00
3+50	0.00	0.00	50	0.00	11,727.00
4+00	0.00	0.00	50	0.00	11,727.00
4+50	0.00	0.00	50	0.00	11,727.00

$$11,727.00 \text{ CF} / 27 \text{ CF/CY} = \boxed{434.33 \text{ CY OF FILL}}$$

VOLUME CALCULATIONS FOR
FILL IN FLOODPLAIN 10-100 YR.

SECTION	AREA SF.	AVG. AREA SF.	DIST. FT.	VOL. CF.	TOTAL VOL CF.
0+00	0.0				
0+50	4.32	2.16	50	108.00	108.00
1+00	172.32	88.32	50	4,416.00	4,524.00
1+50	164.41	169.39	50	8,418.25	13,942.25
2+00	146.58	155.50	50	7,775.00	20,717.25
2+50	18.51	82.55	50	4,127.50	24,844.75
3+00	34.62	26.57	50	1,328.25	26,173.00
3+50	0.00	17.31	50	865.50	27,038.50
4+00	0.86	0.43	50	21.50	27,060.00
4+50	0.00	0.43	50	21.50	27,081.50

$$27,081.50 \text{ CF} / 27 \text{ CF/CY} = 1003.02 \text{ CY OF FILL}$$

TOTAL 0-100 YR FILL = 1,437.35 CY
150% 0-100 YR FILL = 2,156.03 CY

VOLUME CALCULATIONS FOR
CUT IN FLOODPLAIN 0-10 YR.

SECTION	AREA SF.	AVG. AREA SF.	DIST. FT.	VOL. CF.	TOTAL VOL CF.
0+00	0.00	0.00	50	0.00	0.00
0+50	0.00	57.90	50	2,895.00	2,895.00
1+00	175.90	169.14	50	8,457.00	11,352.00
1+50	222.44	153.63	50	7,682.50	19,034.50
2+00	84.82	59.74	50	2,987.00	22,021.50
2+50	34.66	17.33	50	866.50	22,888.00
3+00	0.00	0.00	50	0.00	22,888.00
3+50	0.00	0.00	50	0.00	22,888.00
4+00	0.00	0.00	50	0.00	22,888.00
4+50	0.00				

$$22,888.00 \text{ CF} / 27 \text{ CF/CY} = \boxed{847.70 \text{ CY OF CUT}}$$

VOLUME CALCULATIONS FOR
CUT IN FLOODPLAIN 10-100 YR.

SECTION	AREA SF.	AVG. AREA SF.	DIST. FT.	VOL. CF.	TOTAL VOL CF.
0+00	0.0	113.25	50	5,662.50	5,662.50
+0+50	226.50	159.48	50	7,923.75	13,586.25
1+00	90.45	132.06	50	6,602.75	20,189.00
1+50	173.65	133.93	50	6,697.50	27,146.50
2+00	106.24	143.63	50	7,181.50	34,368.00
2+50	181.04	143.83	50	7,191.00	41,559.00
3+00	106.63	77.09	50	3,854.50	45,413.50
3+50	35.56	17.79	50	889.50	46,002.50
4+00	0.00	0.00	50	0.00	46,002.50
4+50	0.00				

$$46002.50 \text{ CF} / 27 \text{ CF/CY} = \boxed{1703.80 \text{ CY OF CUT}}$$

TOTAL 0-100 YR CUT = 2,551.50 CY

FLOODPLAIN LOST 10-100 YR. = 0.00 SF.
FLOODPLAIN LOST 0-10 YR. = 0.00 SF.
COMP STORAGE 10-100 YR. = 0.00 SF.
COMP STORAGE 0-10 YR. = 0.00 SF.

NATIONAL SURVEY SERVICE, INC.

Plat of Survey

KNOWN AS: 875 SEEGERS ROAD, DES PLAINES, ILLINOIS,
SURVEY FOR: SPX FILTRAN

SURVEY NO. N-127030_2 STAKE

DATE: NOV. 2, 2006



SURVEY NO. N-127030_2 STAKE DATE: NOV. 2, 2006

State of Illinois, Jan. County of Cook,
We hereby certify that we have surveyed the above described property in accordance with official records and that the value given is a true representation of said survey. Dimensions are corrected to a temperature of 62° Fahrenheit. This professional service conforms to the current Illinois minimum standards for a boundary survey.

NATIONAL SURVEY SERVICE, INC.
PROFESSIONAL LAND SURVEYORS

30 S. MICHIGAN AVENUE, SUITE 200
CHICAGO, ILLINOIS 60603

TEL: 312-630-9480 FAX: 312-630-9484

BY: *Michael D. Rainaldi*
LICENSED PROFESSIONAL LAND SURVEYOR NO. 5952

