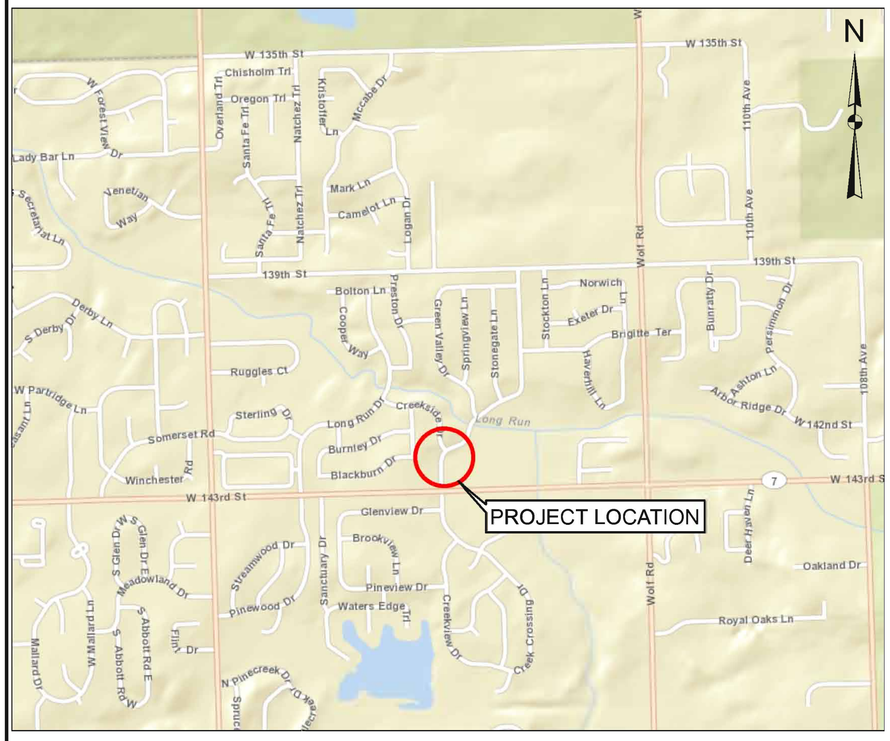
ORLAND PARK
CREEKSIDE SUBDIVISION SOUTH DRAINAGE

INDEX

LOCATION / VICINITY MAP



IDOT STANDARDS

280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-03	FRAME AND LIDS, TYPE 1
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-02	TRAFFIC CONTROL DEVICES

BENCHMARK

SEE ALIGNMENT AND BENCHMARKS SHEET

LOCATION

T36N, R12E, SEC 16, 17
LATITUDE 41°37'49"
LONGITUDE 87°54'05"

CALL JULIE 811
WITH THE FOLLOWING:
COUNTY COOK
CITY-TOWNSHIP ORLAND PARK-ORLAND
48 HOURS BEFORE YOU DIG.
EXCLUDING SAT., SUN., & HOLIDAYS

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION

NICHOLAS J. MOREL
062-060393
REGISTERED PROFESSIONAL ENGINEER
OF
ILLINOIS

CIVIL ENGINEER _____ DATE

NICHOLAS MOREL
ILLINOIS REGISTRATION No. 062.060393
EXPIRATION DATE: 11/30/2013

CLIENT :

Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFESSIONAL DESIGN FIRM NO. 184-001175
EXPIRATION DATE: 04/30/13

9/11/2013 nmorel

FILE NAME: N:\ORLANDPARK\12013\Civil\CVR_12013.SHT

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2012: THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2013: THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD), "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JULY 2009 SIXTH EDITION, THE "DETAILS" IN THE PLANS, LATEST EDITION OF THE MANUAL OF TEST PROCEDURE OF MATERIALS, THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS, THE AMERICANS WITH DISABILITIES ACT OF 1990 ACCESSIBILITY GUIDELINES, THE "DRAFT" REHABILITATION ACT OF 1973 (SECTION 504), AND THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES.

2. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

3. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:

   A. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.

   B. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE, MAINTAIN AND RE-ERECT SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS.

   C. THE CONTRACTOR WILL REMOVE ALL UNUSED SIGNS NOT CALLED OUT TO BE RELOCATED. ALL UNUSED SIGNS WILL BE RETURNED TO THE OWNER OR DISPOSED OF AS DIRECTED BY THE ENGINEER. THE WORK WILL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION.

   D. SIGNS WILL BE INSTALLED PER IDOT HIGHWAY STANDARD 720006 AT TEMPORARY AND PERMANENT LOCATIONS.

4. EARTH EXCAVATION

   A. ALL EMBANKMENT WIDENING SHALL BE SUFFICIENTLY BENCHED INTO EXISTING EMBANKMENTS/SLOPES PER ARTICLE 205 OF THE STANDARD SPECIFICATIONS, AND AS APPROVED BY THE ENGINEER. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICE FOR EARTH EXCAVATION..

   B. ALL EXCESS MATERIAL WHICH MEET SECTION 205 OF THE STANDARD SPECIFICATIONS SHALL BE USED AS EMBANKMENT PER SECTION 205 OF THE STANDARD SPECIFICATIONS.

   C. EARTH EXCAVATION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202 OF THE STANDARD SPECIFICATIONS, IN ADDITION TO ITEMS SPECIFIED IN SECTION 202 AND AS NOTED IN THE PLANS AND SPECIAL PROVISIONS, EARTH EXCAVATION SHALL CONSIST OF:

      1. EXCAVATION TO SUBGRADE ELEVATION.
      2. PLACING AND COMPACTING SUITABLE EXCAVATED MATERIAL FOR FILL AREAS IN ACCORDANCE WITH SECTION 205 OF THE "STANDARD SPECIFICATIONS".

   D. EARTH MOVED MORE THAN ONCE DUE TO CONSTRUCTION STAGING AND/OR PROCEDURES SELECTED BY THE CONTRACTOR WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.

5. DRAINAGE

   A. DURING THE CONSTRUCTION OPERATIONS WHEN LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, DETOUR 1, AND DETOUR 2.

   B. DEWATERING REQUIRED TO KEEP EXCAVATIONS DRY SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO SEPERATE PAYMENT WILL BE MADE FOR THIS WORK.

6. ALL REFERENCES TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE LATEST STANDARDS OF THE DEPARTMENT.

7. SOME QUANTITIES ARE GIVEN IN BOTH SUMMARY FORM AND ON THE PLAN SHEETS. CARE SHOULD BE TAKEN TO AVOID DUPLICATION OF QUANTITIES.

8. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS IN ACCORDANCE WITH SECTION 107.

9. UTILITIES

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. CONTRACTOR SHALL CONTACT AND COORDINATE WITH UTILIY COMPANIES FOR ALL UTILITY ADJUSTMENTS THAT ARE REQUIRED DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE SPECIAL PROVISIONS.

   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ALL UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

   C. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 811 OR 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATION IS REQUIRED.)

   D. PUBLIC AND PRIVATE UTILITIES: THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE LOCATIONS OF UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM IN ACCORDANCE WITH ARTICLE 105.07.

10. WATER, STORM SEWER, AND SANITARY SEWER

    A. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE/SHE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE/SHE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF STRUCTURE EXCAVATION.

    B. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR AUTHORIZATION FROM THE VILLAGE WATER DEPARTMENT. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

11. MISCELLANEOUS

    A. ALL PEDESTRIAN ROUTES CONSTRUCTED AS PART OF THIS PROJECT SHALL BE ADA COMPLIANT.

    B. ALL SAWCUTTING SHALL BE INCLUDED IN THE COST OF THE ADJACENT REMOVAL ITEM AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

    C. CONTRACTOR WILL REPAIR, TO THE SATISFACTION OF THE ENGINEER, ALL DAMAGE TO EXISTING ITEMS NOT SHOWN FOR REMOVAL. THIS WORK WILL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.

12. THE CONTRACT DOCUMENTS ARE NOT INTENDED TO SHOW EVERY AND ALL DETAILS OF WORK TO BE PERFORMED OR EQUIPMENT TO BE SUPPLIED. THE INTENT OF THE CONTRACT DOCUMENTS IS TO ILLUSTRATE THE DESIGN AND LAYOUT. THE CONTRACTOR SHALL BE KNOWLEDGEABLE AND REGULARLY ENGAGED IN THE TYPE OF WORK DESCRIBED BY THESE CONTRACT DOCUMENTS, AND SHALL BE RESPONSIBLE FOR UNDERSTANDING THEIR INTENT. ANY WORK TO BE PERFORMED OR ITEM OF EQUIPMENT TO BE SUPPLIED WHICH IS NOT SPECIFICALLY CALLED FOR BY THESE CONTRACT DOCUMENTS BUT WHICH IS NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFUL WORKING SYSTEM SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.

13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.

14. USE OF CCDD FILL OPERATIONS: PER PUBLIC ACT 97-0137, IF THE CONTRACTOR CHOOSES TO DISPOSE OF UNCONTAMINATED SOIL OR UNCONTAMINATED SOIL MIXED WITH CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) AT A CCDD FILL OPERATION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL NECESSARY FIELD AND LABORATORY ANALYSIS AND TO OBTAIN THE LICENSED PROFESSIONAL ENGINEER'S CERTIFICATION REQUIRED AS PER PUBLIC ACT 96-1416 TO USE THE SITE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE STORM SEWER INSTALLATION, AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

SUMMARY OF QUANTITIES

ITEM #	ITEM	UNIT	QUANTITY
20101200	TREE ROOT PRUNING	EACH	1
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	1
20200100	EARTH EXCAVATION	CU YD	20
20800150	TRENCH BACKFILL	CU YD	14
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	265
25200100	SODDING	SQ YD	265
28000400	PERIMETER EROSION BARRIER	FOOT	270
28000500	INLET AND PIPE PROTECTION	EACH	1
28000510	INLET FILTERS	EACH	4
28100107	STONE RIPRAP, CLASS A4	SQ YD	25
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	75
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	28
44000600	SIDEWALK REMOVAL	SQ FT	75
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	28
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1
54247150	GRATING FOR CONCRETE FLARED END SECTION 30"	EACH	1
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	3
550A0140	STORM SEWERS, CLASS A, TYPE 1 30"	FOOT	194
55100500	STORM SEWER REMOVAL 12"	FOOT	27
55100900	STORM SEWER REMOVAL 18"	FOOT	95
60221200	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	2
60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	2
60500050	REMOVING CATCH BASINS	EACH	2
60500060	REMOVING INLETS	EACH	2
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	28
70101700	TRAFFIC CONTROL AND PROTECTION	L. SUM	1
X5509900	ABANDON AND FILL EXISTING STORM SEWER	FOOT	85
X6022940	MANHOLES, TYPE A, 5'-DIAMETER, WITH SPECIAL FRAME, CLOSED LID	EACH	1
Z0013798	CONSTRUCTION LAYOUT	L. SUM	1

UTILITY COORDINATION

NAME OF FACILITY	AT&T	COMCAST	COMED	ILLINOIS AMERICAN WATER	METROPOLITAN WATER RECLAIMATION DISTRICT	NICOR GAS	ONE OK NGL PIPELINE	ORLAND SCHOOL DISTRICT
CONTACT NAME	DAVID PHELPS	MARTHA GIERAS	ILYAS MOHIUDDIN	ISRAEL SANDOVAL	JOSEPH SCHESSLER	CONSTANCE LANE	SHERREL COPELAND	DAN DOOGAN
PHONE NUMBER	630-573-6464	630-600-6352	708-235-2692	630-739-8837	312-751-3236	630-388-3830	580-395-2377	708-364-3362
DATE PLANS SENT	12/11/12	12/11/12	12/11/12	12/11/12	12/11/12	12/11/12	12/11/12	12/11/12
DATE OF RESPONSE					12/11/12			
RESPONSE					ALL CLEAR			

CHRISTOPHER B. BURKE ENGINEERING, LTD.
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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:
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14700 Ravinia Avenue
Orland Park, IL 60462

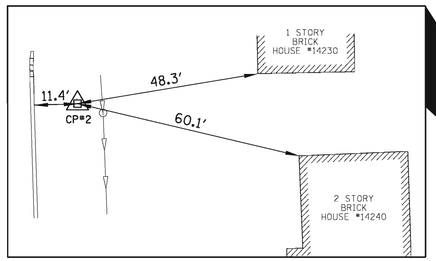
NO.	DATE	NATURE OF REVISION	CHKD.

FILE NAME: N:\ORLANDPARK\120213\CIVIL\NOT_120213.SHT

DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:
CREEKSIDE SUBDIVISION SOUTH DRAINAGE
GENERAL NOTES AND TYPICAL SECTIONS

PROJ. NO.	120213
DATE:	04/26/13
SHEET	2 OF 9
DRAWING NO.	NOT



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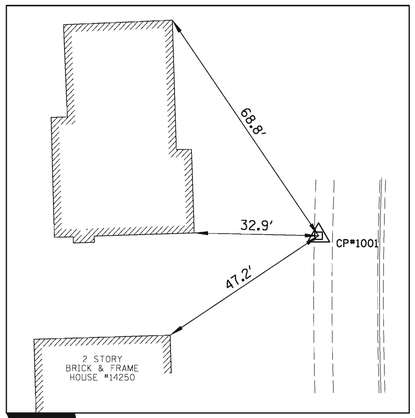

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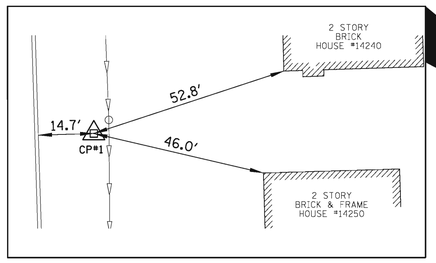

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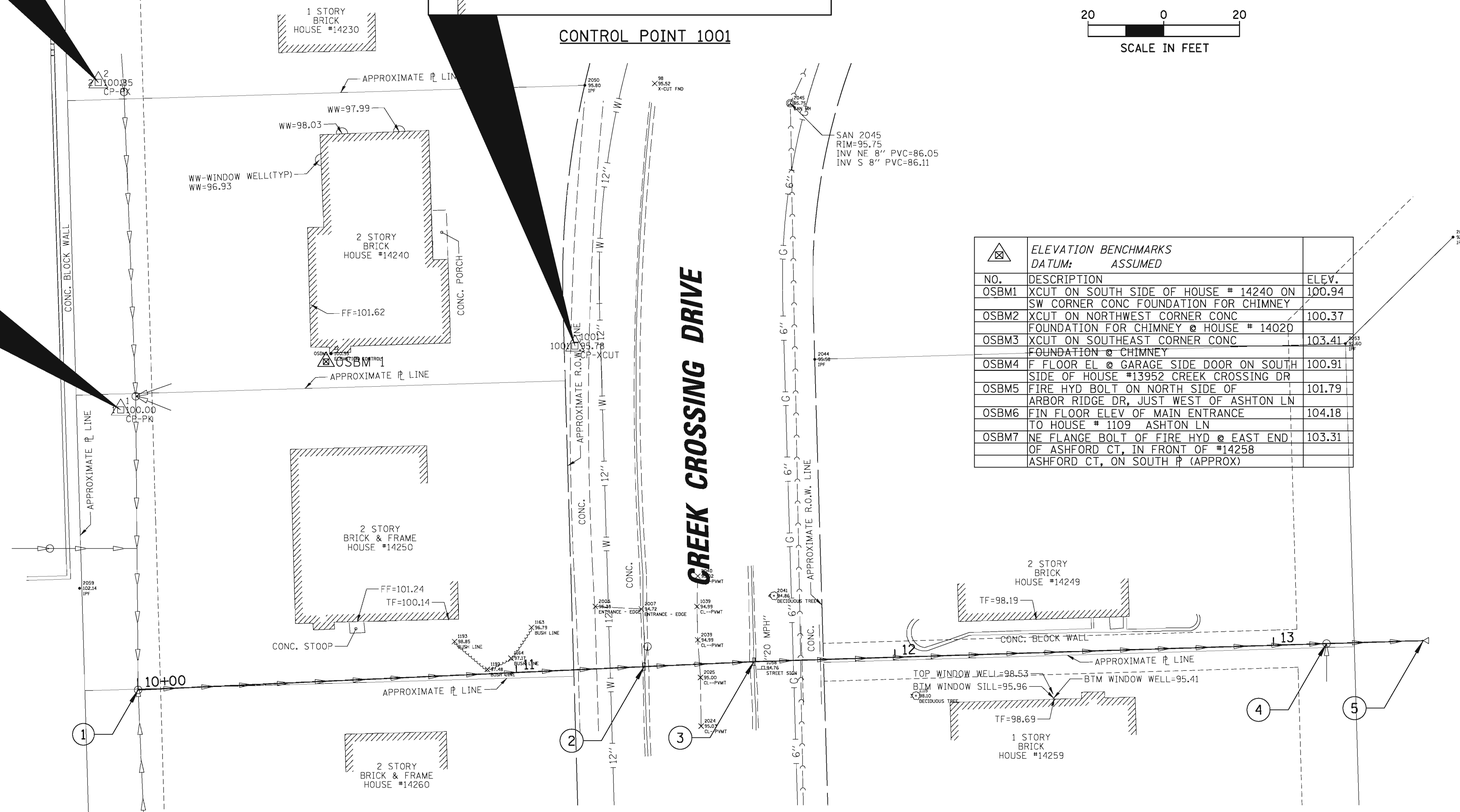

	ELEVATION BENCHMARKS DATUM: ASSUMED	
NO.	DESCRIPTION	ELEV.
OSBM1	XCUT ON SOUTH SIDE OF HOUSE # 14240 ON SW CORNER CONC FOUNDATION FOR CHIMNEY	100.94
OSBM2	XCUT ON NORTHWEST CORNER CONC FOUNDATION FOR CHIMNEY @ HOUSE # 14020	100.37
OSBM3	XCUT ON SOUTHEAST CORNER CONC FOUNDATION @ CHIMNEY	103.41
OSBM4	F FLOOR EL @ GARAGE SIDE DOOR ON SOUTH SIDE OF HOUSE #13952 CREEK CROSSING DR	100.91
OSBM5	FIRE HYD BOLT ON NORTH SIDE OF ARBOR RIDGE DR, JUST WEST OF ASHTON LN	101.79
OSBM6	FIN FLOOR ELEV OF MAIN ENTRANCE TO HOUSE # 1109 ASHTON LN	104.18
OSBM7	NE FLANGE BOLT OF FIRE HYD @ EAST END OF ASHFORD CT, IN FRONT OF #14258 ASHFORD CT, ON SOUTH ℄ (APPROX)	103.31

#	ALIGNMENT COORDINATES		
POINT NO.	STA.	NORTHING	EASTING
1	10+00.00	1,808,134.44	1,102,169.69
2	11+33.72	1,808,140.60	1,102,303.27
3	11+62.73	1,808,141.89	1,102,332.25
4	13+13.98	1,808,146.68	1,102,483.42
5	13+39.50	1,808,147.44	1,102,508.94

△	HORIZONTAL CONTROL POINTS				
POINT NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	STATION	OFFSET
CP#1	1,808,208.35	1,102,165.09	SET PK NAIL		
CP#2	1,808,294.71	1,102,159.21	SET PK NAIL		
CP#1001	1,808,225.22	1,102,285.04	SET X-CUT	11+19.40	85.37' LT

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Orland Park, IL 60462

NO.	DATE	NATURE OF REVISION	CHKD.

FILE NAME N:\ORLANDPARK\120213\Civil\BMK_120213.SHT

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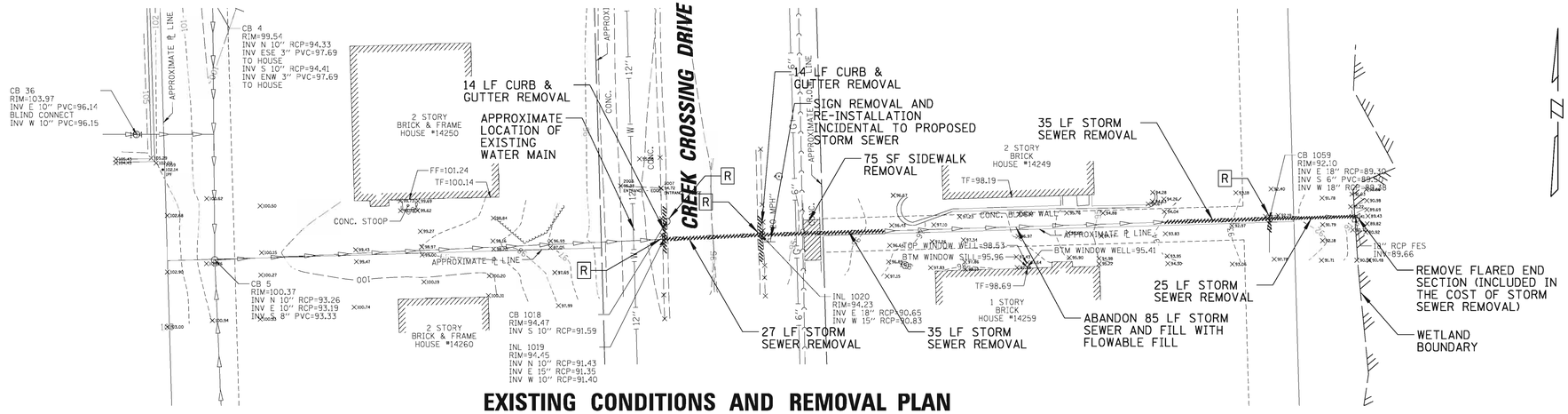
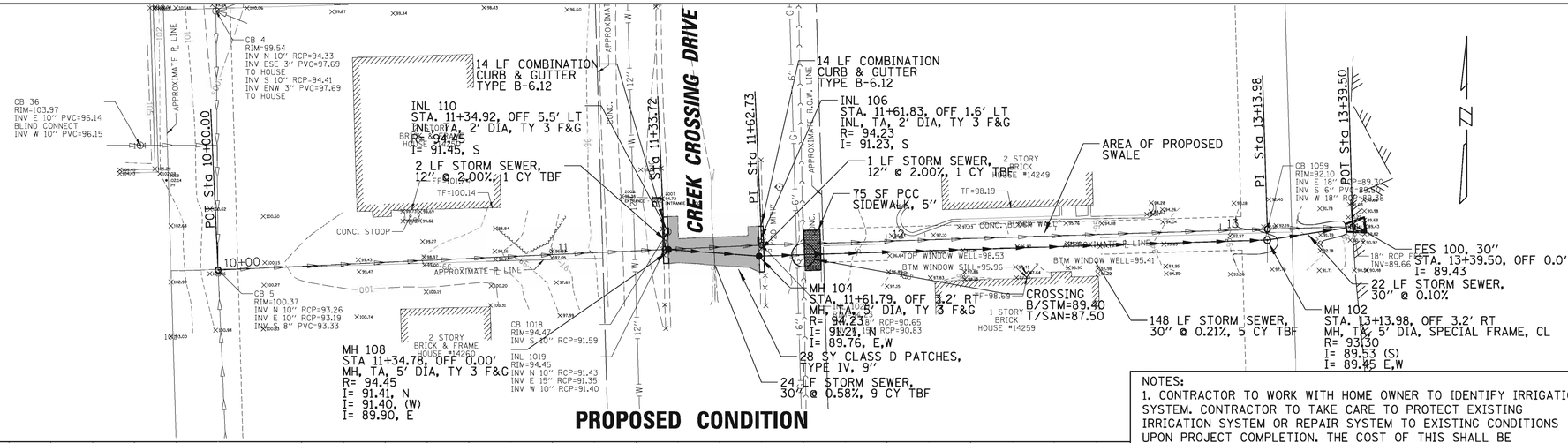
DWN.	PDR
CHKD.	JGS
SCALE:	20'
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:
CREEKSIDE SUBDIVISION SOUTH DRAINAGE ALIGNMENT TIES AND BENCHMARK

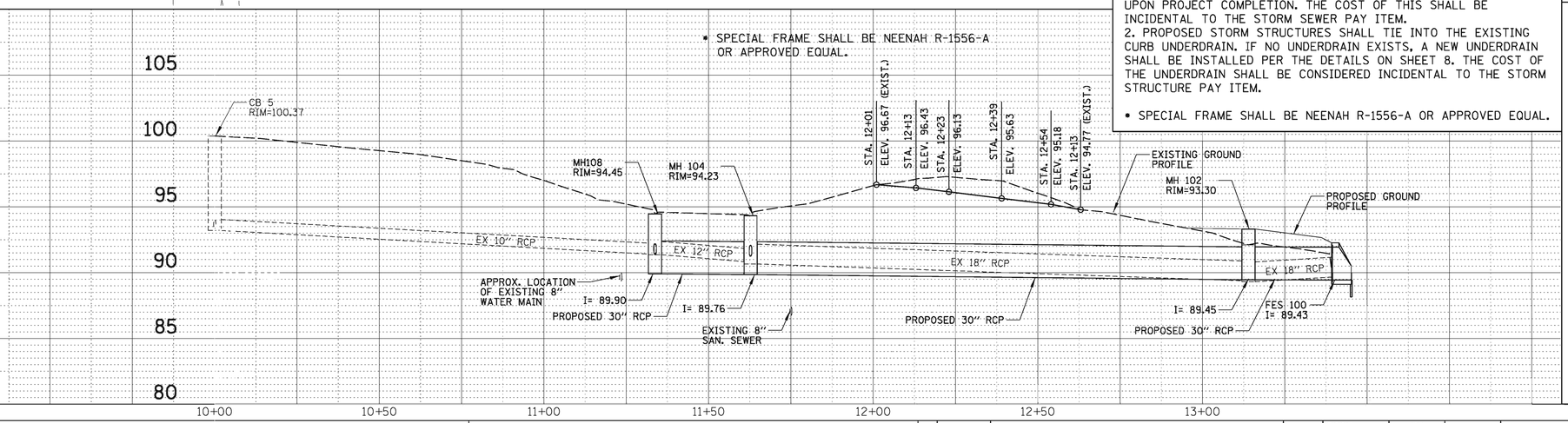
PROJ. NO.	120213
DATE:	04/26/13
SHEET	3 OF 9
DRAWING NO.	BMK

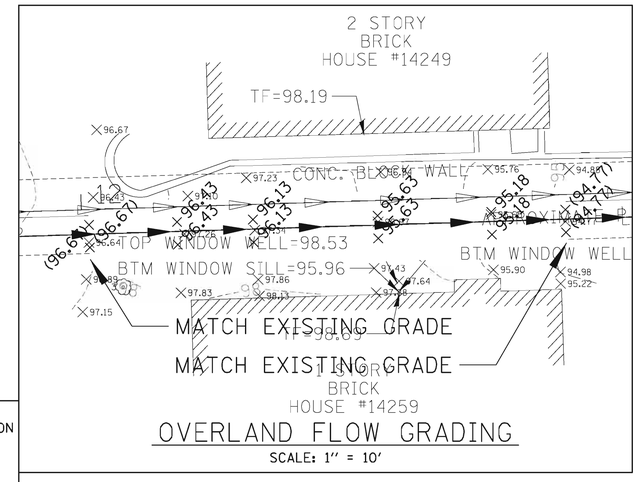


EXISTING CONDITIONS AND REMOVAL PLAN



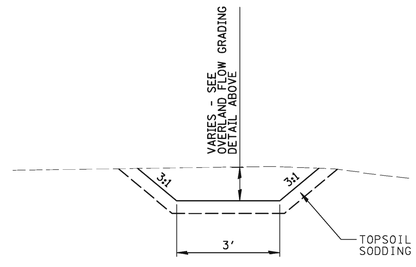
PROPOSED CONDITION





NOTES:
1. CONTRACTOR TO WORK WITH HOME OWNER TO IDENTIFY IRRIGATION SYSTEM. CONTRACTOR TO TAKE CARE TO PROTECT EXISTING IRRIGATION SYSTEM OR REPAIR SYSTEM TO EXISTING CONDITIONS UPON PROJECT COMPLETION. THE COST OF THIS SHALL BE INCIDENTAL TO THE STORM SEWER PAY ITEM.
2. PROPOSED STORM STRUCTURES SHALL TIE INTO THE EXISTING CURB UNDERDRAIN. IF NO UNDERDRAIN EXISTS, A NEW UNDERDRAIN SHALL BE INSTALLED PER THE DETAILS ON SHEET 8. THE COST OF THE UNDERDRAIN SHALL BE CONSIDERED INCIDENTAL TO THE STORM STRUCTURE PAY ITEM.

• SPECIAL FRAME SHALL BE NEENAH R-1556-A OR APPROVED EQUAL.



OVERLAND FLOW DITCH SECTION

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14700 Ravinia Avenue
Orland Park, IL 60462

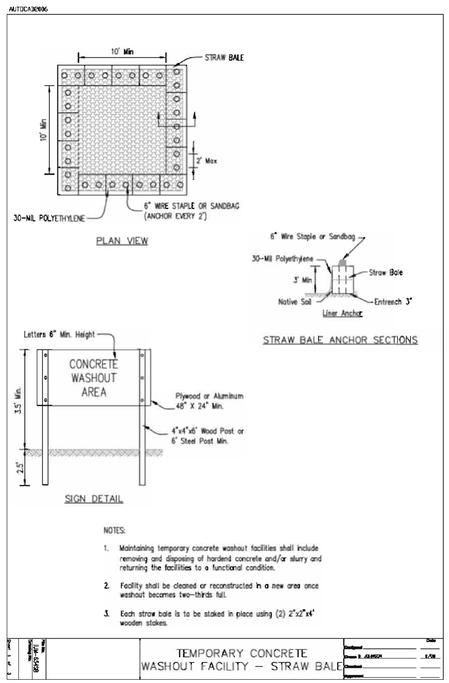
NO.	DATE	NATURE OF REVISION	CHKD.

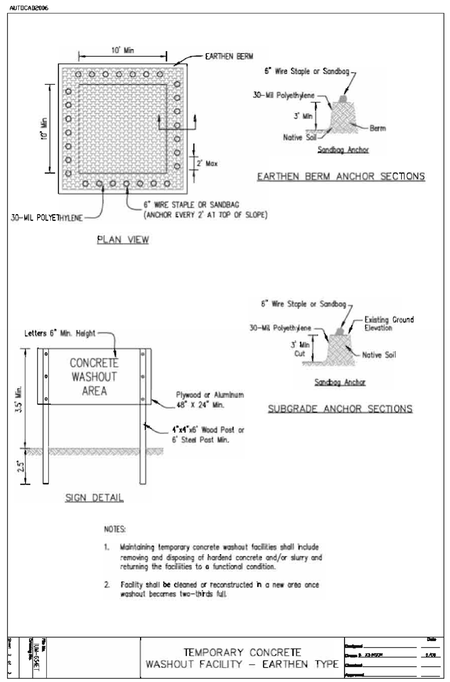
FILE NAME: N:\ORLANDPARK\120213\CIVIL\RPP_120213.SHT

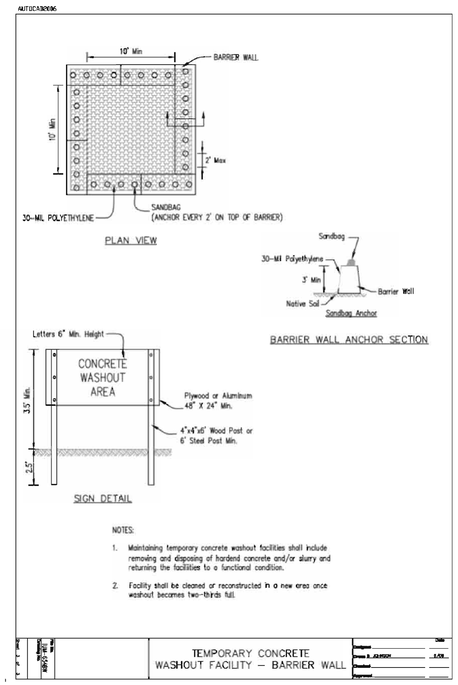
DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	20'
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

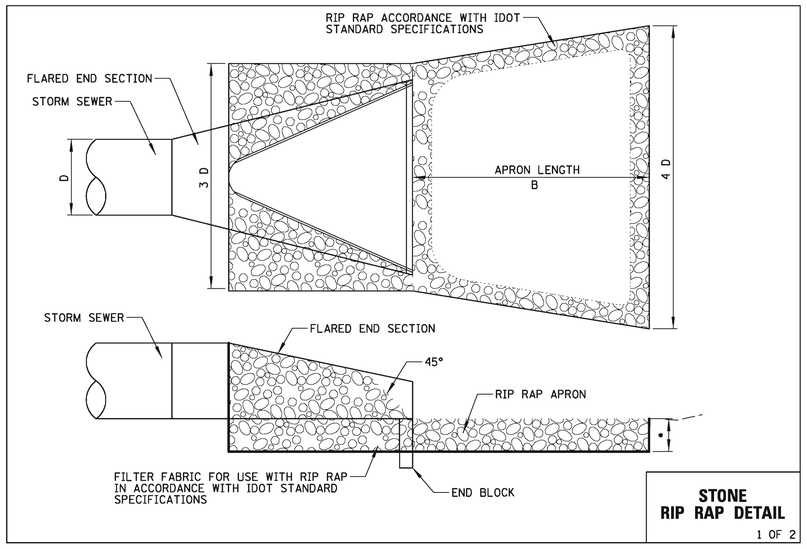
TITLE:
CREEKSIDE SUBDIVISION SOUTH DRAINAGE PLAN AND PROFILE

PROJ. NO.	120213
DATE:	04/26/13
SHEET	4 OF 9
DRAWING NO.	PRF









STONE RIP RAP DETAIL

1 OF 2

RIP RAP								
PIPE DIAMETER (IN.) D	STONE RIP RAP						BEDDING	
	QUALITY DESIGNATION	GRADATION NUMBER	MINIMUM THICKNESS (IN.) A	MINIMUM LENGTH (FT.) B	WEIGHT RANGE (#)	WEIGHT AVERAGE (#)	SIZE AVERAGE (IN.)	GRADATION NUMBER	MINIMUM THICKNESS (IN.) C
12	B	3	12"	12'	1-50	10	4.5"	N/A	N/A
15	B	3	14"	14'	1-50	10	4.5"	N/A	N/A
18	B	4	16"	16'	1-50	40	7"	1 OR CA-3	6"
21	B	4	18"	18'	1-150	40	7"	1 OR CA-3	6"
24	B	4	20"	20'	1-150	40	7"	1 OR CA-3	6"
30	B	4	22"	22'	1-150	40	7"	1 OR CA-3	6"
36	B	5	24"	24'	3-400	90	10"	1 OR CA-3	8"
42	B	5	26"	26'	3-400	90	10"	1 OR CA-3	8"
48	B	6	28"	28'	6-600	170	12"	2 OR CA-1	10"
54	B	6	32"	32'	6-600	170	12"	2 OR CA-1	10"
60	B	6	36"	36'	6-600	170	12"	2 OR CA-1	10"
72	B	6	44"	44'	6-600	170	12"	2 OR CA-1	10"

NOTE:

1. FOR PIPE SIZE 72" AND LARGER A SPECIAL DESIGN OF RIP RAP OR APRON IS REQUIRED.
2. GRADATION REFFER TO IDOT SPECIFICATIONS AND STANDARDS.

STONE RIP RAP DETAIL

2 OF 2

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:

Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

NO.	DATE	NATURE OF REVISION	CHKD.

FILE NAME: N:\ORLANDPARK\120213\CIVIL\ERO-DET01_120213.SHT

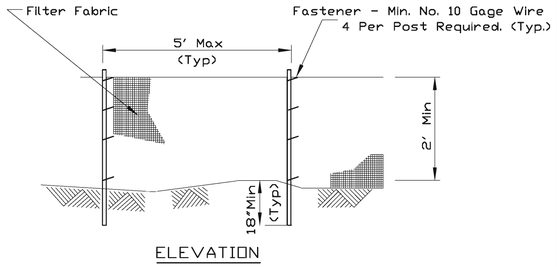
DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	2'
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:

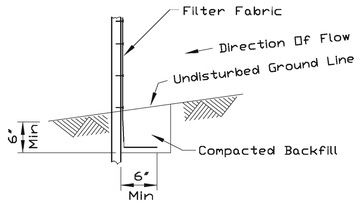
CREEKSIDE SUBDIVISION SOUTH DRAINAGE EROSION CONTROL DETAILS

PROJ. NO.	120213
DATE:	04/26/13
SHEET	5 OF 9
DRAWING NO.	ECP DET_1

SILT FENCE PLAN



ELEVATION



FABRIC ANCHOR DETAIL

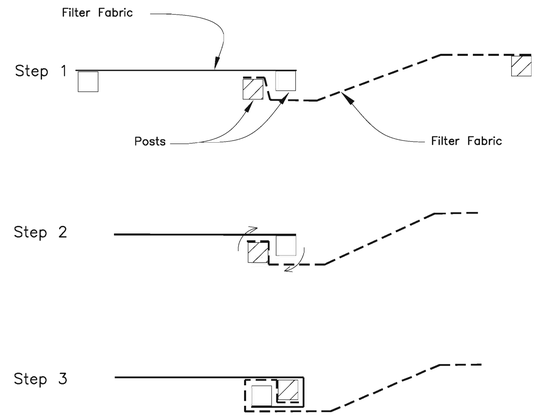
NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 50 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

NRCS
Natural Resources Conservation Service

STANDARD DWG. NO.
IL-620
SHEET 1 OF 2
DATE 11-20-01

SILT FENCE



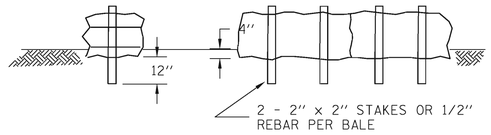
ATTACHING TWO SILT FENCES

NOTES:
1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Drive both posts a minimum of 18 inches into the ground and bury the flap.

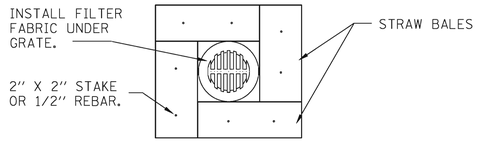
REFERENCE
Project
Designed Date
Checked Date
Approved Date

NRCS
Natural Resources Conservation Service

STANDARD DWG. NO.
IL-620(W)
SHEET 2 OF 2
DATE 1-29-99



STRAW BALE PLACEMENT

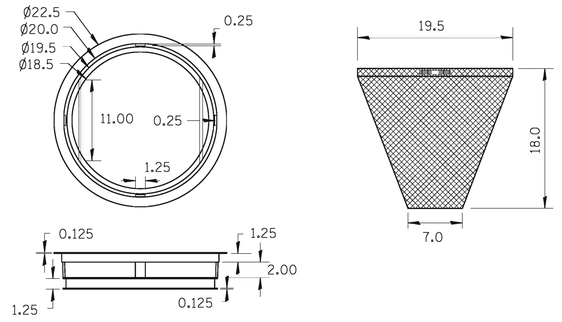


SILTATION CONTROL SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION

INLET AND PIPE PROTECTION DETAIL

NOT TO SCALE

TYPICAL ROUND INLET PROTECTOR



NOTES:
FRAME: Top ring constructed from 1 1/4" x 1 1/4" x 1/8" angle. Base ring fabricated from 1 1/2" x 1/2" x 1/8" channel. Handles and suspension brackets constructed from 1/4" x 1/4" flat. All steel conforming to ASTM-A36.

REPLACEABLE BAG: Constructed from 4 oz./sq.yd. non-woven polypropylene geotextile reinforced with polyester mesh. Connected to base ring with stainless steel strap and lock.

INLET FILTER DETAIL

NOT TO SCALE

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:
Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

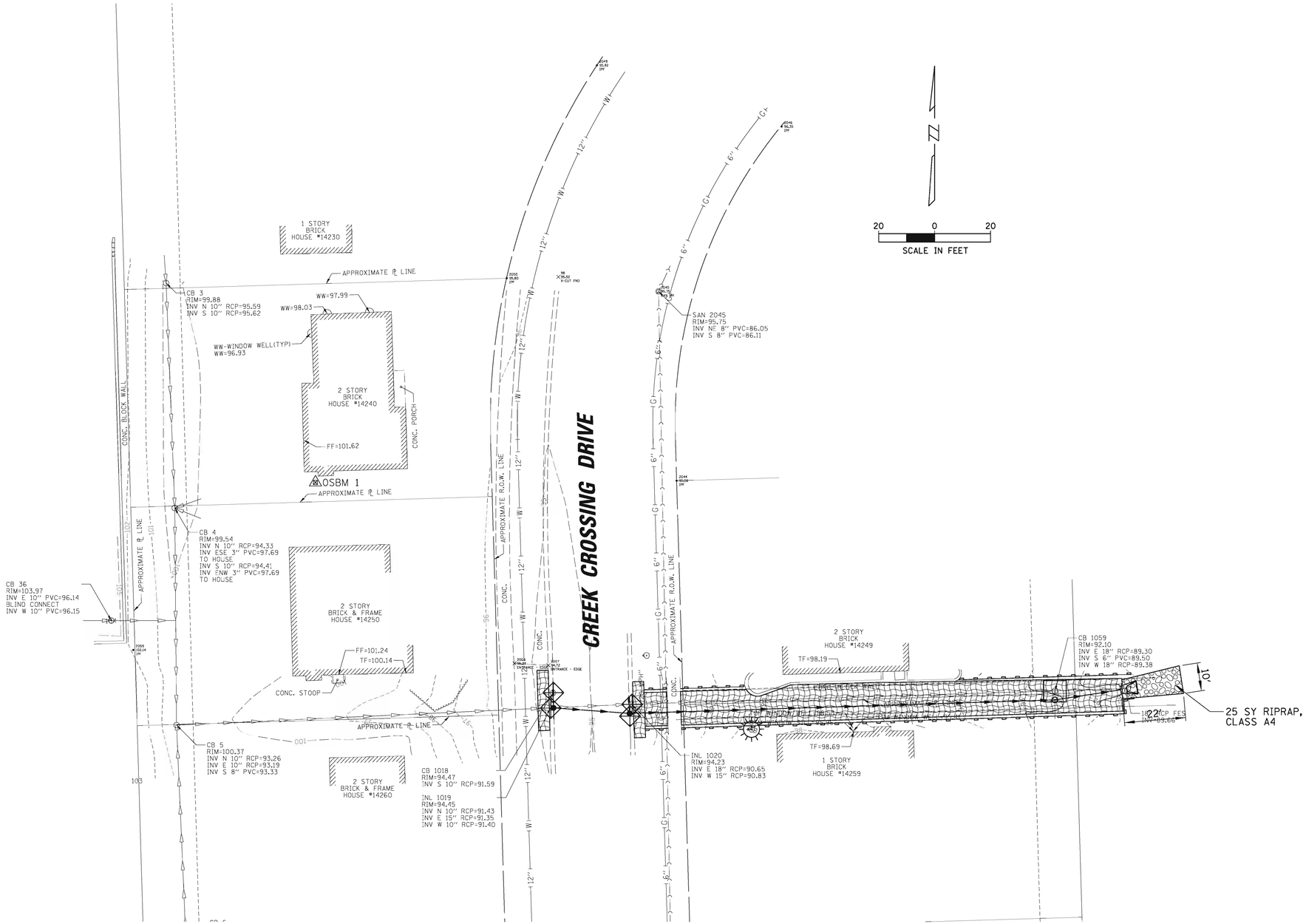
NO.	DATE	NATURE OF REVISION	CHKD.

FILE NAME: N:\ORLANDPARK\120213\CIVIL\ERO-DET02_120213.SHT

DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:
CREEKSIDE SUBDIVISION SOUTH DRAINAGE EROSION CONTROL DETAILS

PROJ. NO. 120213
DATE: 04/26/13
SHEET 6 OF 9
DRAWING NO.
ECP DET_2



LEGEND:

- PERIMETER EROSION BARRIER
- INLET FILTER
- INLET AND PIPE PROTECTION
- TREE PRUNE/ROOT PRUNE
- SODDING
  TOPSOIL FURNISH AND PLACE, 4"
- RIPRAP CLASS A4

CHRISTOPHER B. BURKE ENGINEERING, LTD.
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Rosemont, Illinois 60018
(847) 823-0500

CLIENT:
Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

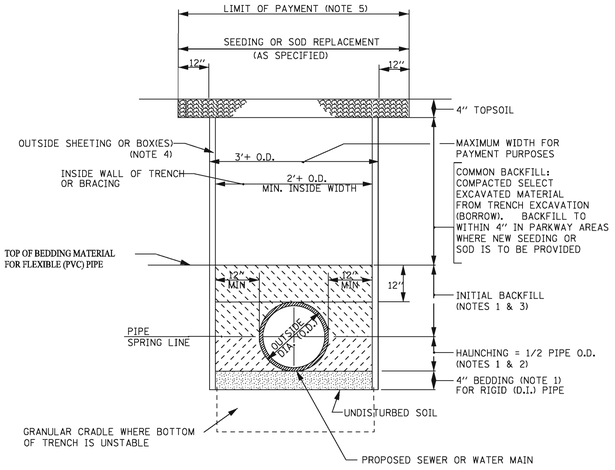
NO.	DATE	NATURE OF REVISION	CHKD.

FILE NAME: N:\ORLANDPARK\120213\CIVIL\ERO_120213.SHT

DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	20'
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:
CREEKSIDE SUBDIVISION SOUTH DRAINAGE EROSION CONTROL PLAN

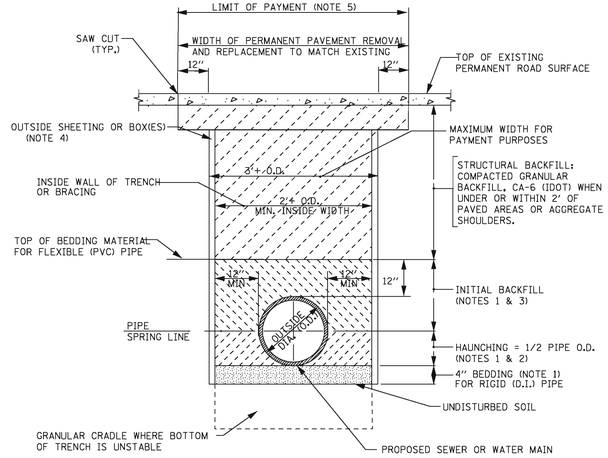
PROJ. NO.	120213
DATE:	04/26/13
SHEET	7 OF 9
DRAWING NO.	ECP



WITHIN PARKWAY AREAS (COMMON BACKFILL)

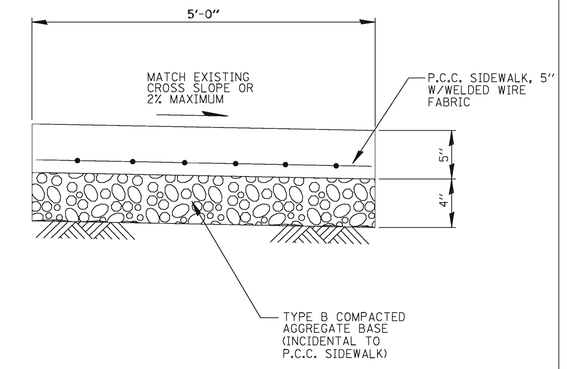
TRENCH BACKFILL NOTES:

1. BEDDING/HAUNCHING/INITIAL BACKFILL:
   A. FOR FLEXIBLE (PVC) PIPE THE BEDDING/HAUNCHING/INITIAL BACKFILL MATERIAL SHALL CONFORM TO IDOT CA-11 OR CA-13 GRADATION.
   B. FOR RIGID (D.I.) PIPE THE BEDDING MATERIAL SHALL BE CA-11, AND THE HAUNCHING/INITIAL BACKFILL SHALL MATCH THE TRENCH BACKFILL MATERIAL.
2. AFTER BEDDING HAS BEEN PLACED/COMPACTED/BROUGHT TO GRADE, PLACE AND COMPACT HAUNCHING TO PIPE SPRING LINE.
3. PLACE INITIAL BACKFILL IN TWO STAGES AS FOLLOWS: 1st STAGE - PLACE & COMPACT TO TOP OF PIPE; 2nd STAGE - PLACE & COMPACT AT LEAST 12" OVER TOP OF PIPE.
4. VOIDS LEFT BY SHEETING/BRACING WHEN REMOVED SHALL BE FILLED WITH FINE SAND AND SHALL BE CONSIDERED INCIDENTAL TO THE WORK.SHEETING TO BE LEFT IN PLACE WHEN SPECIFIED ON THE PLANS.
5. CONTRACTOR IS RESPONSIBLE FOR ALL RESTORATION BEYOND THE LIMIT OF PAYMENT AS SHOWN.



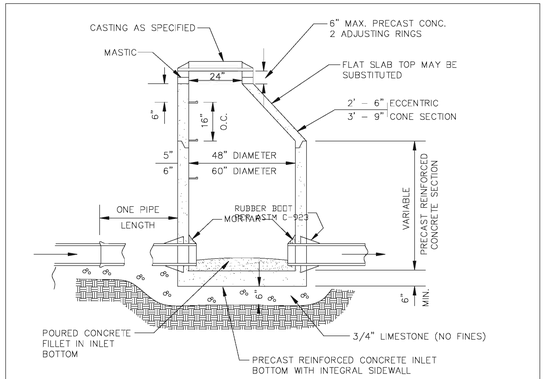
WITHIN PAVED AREAS (STRUCTURAL BACKFILL)

NOT TO SCALE



SIDEWALK DETAIL

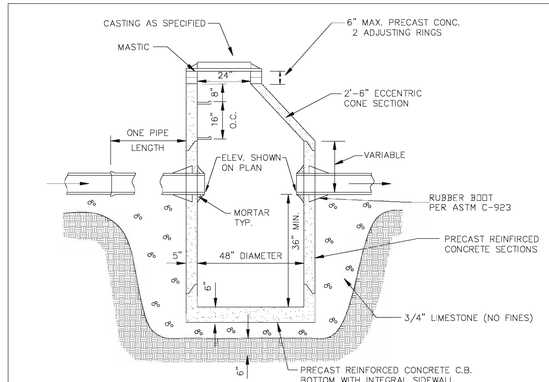
TYPICAL TRENCH BACKFILL DETAILS & TRENCHING NOTES FOR PARKWAY AREAS AND PAVED AREAS



NOTES:

1. Adjustment: Any structure located within pavement shall require the use of at least one (1) rubber adjustment riser, Infra-Riser brand or approved equal, and, if necessary, said riser shall be of the tapered type in order to match the proposed grade of the roadway. No more than two (2) precast concrete adjusting rings with six (6) inch maximum height adjustment shall be allowed. Adjustments within pavement that are less than three (3) inches in height shall consist of only rubber adjustment riser(s). The minimum thickness of a rubber adjustment riser shall be one (1) inch. Adjustments within pavement greater than three (3) inches in height shall use a minimum three (3) inch precast concrete riser for the lower riser, and the final riser shall be of the rubber type.
2. Pipe and frame seals: All pipe connection openings shall be precast with resilient rubber water tight pipe to manhole sleeves or seals conforming to ASTM C-923. Adapter chimney seal with twelve (12) inch sleeve type shall extend from the manhole cone to the manhole frame for all structures in the right-of-way.
3. Sealing: All mating surfaces of adjustment riser(s), structure sections, and frames shall be sealed with a mastic sealant. No concrete mortar or epoxy shall be allowed as a sealant for adjustment risers, structure sections or frames. If multiple adjustment risers are required, a continuous application of sealant shall be applied between each unit.
4. All bottom sections shall be monolithically precast including bases and invert flowlines.
5. Provide CA-6 aggregate backfill around manhole to subgrade elevation in paved areas.for subgrade.
6. ALT. MANHOLE BOTTOM = PRECAST REINF. CONC. BASE
7. PROVIDE CA-6 AGGREGATE BACKFILL AROUND MANHOLE TO SUBGRADE ELEV. IN PAVED AREAS

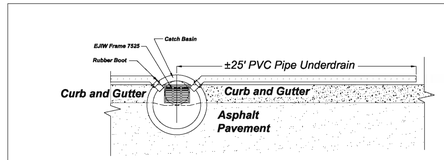
STORM MANHOLE		
STORMMH.DWG	STORM SEWER IMPROVEMENT	DATE:
DRAWN BY:		REVISED:
Village of Orland Park		REVISED:
Engineering Department		REVISED:
		DRAWING NO. STS-01



NOTES:

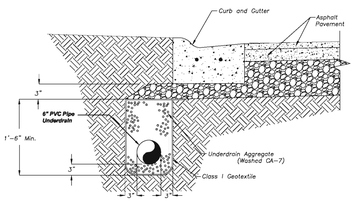
1. Adjustment: Any structure located within pavement shall require the use of at least one (1) rubber adjustment riser, Infra-Riser brand or approved equal, and, if necessary, said riser shall be of the tapered type in order to match the proposed grade of the roadway. No more than two (2) precast concrete adjusting rings with six (6) inch maximum height adjustment shall be allowed. Adjustments within pavement that are less than three (3) inches in height shall consist of only rubber adjustment riser(s). The minimum thickness of a rubber adjustment riser shall be one (1) inch. Adjustments within pavement greater than three (3) inches in height shall use a minimum three (3) inch precast concrete riser for the lower riser, and the final riser shall be of the rubber type.
2. Pipe and frame seals: All pipe connection openings shall be precast with resilient rubber water tight pipe to manhole sleeves or seals conforming to ASTM C-923. Adapter chimney seal with twelve (12) inch sleeve type shall extend from the manhole cone to the manhole frame for all structures in the right-of-way.
3. Sealing: All mating surfaces of adjustment riser(s), structure sections, and frames shall be sealed with a mastic sealant. No concrete mortar or epoxy shall be allowed as a sealant for adjustment risers, structure sections or frames. If multiple adjustment risers are required, a continuous application of sealant shall be applied between each unit.
4. All bottom sections shall be monolithically precast including bases and invert flowlines.
5. Provide CA-6 aggregate backfill around catch basin to subgrade elevation in paved areas.for subgrade.

CATCHBASIN TYPE A		
CBASIN_A.DWG	STORM SEWER IMPROVEMENT	DATE:
DRAWN BY:		REVISED:
Village of Orland Park		REVISED:
Engineering Department		REVISED:
		DRAWING NO. STS-02



PLAN VIEW

SCALE: N.T.S.



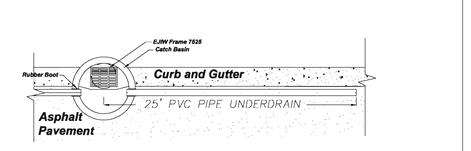
PIPE UNDERDRAIN BEHIND CURB

SCALE: N.T.S.

Underdrain Notes:

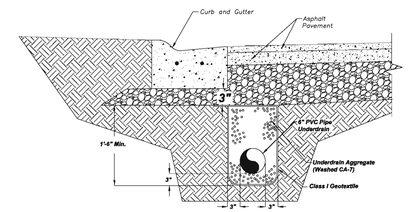
1. *The installation of the underdrains shall conform to section 601.04 of the Illinois Department of Transportaion Standard pecifications for Road and Bridge Construction.*
2. *Pipe material shall be 6" perforated PVC, per article 1040.03 of the IDOT Standard Specifications.*
3. *The underdrains shall be installed with the drain perforations down. All underdrains shall be held in the center of the trench by mechanical means while placing compacted trench backfill of washed CA-7.*
4. *After the underdrain pipe is installed, the geotextile shall be folded over the underdrain aggregate and overlapped a minimum of 12".*
5. *The underdrains shall have watertight joints, and be tied into the nearest storm sewer inlet. The connection to the inlet structure shall conform to ASTM C-923.*

CURB UNDERDRAIN DETAIL - Back of Curb		
Underdrain-bc.dwg	STREET & PAVEMENT	DATE: 11/20/2008
DRAWN BY:		REVISED:
Village of Orland Park		REVISED: 2-1-4-08 cjr
Public Works Department		DRAWING NO. STR-20



PLAN VIEW

SCALE: N.T.S.



PIPE UNDERDRAIN FRONT OF CURB

SCALE: N.T.S.

Underdrain Notes:

1. *The installation of the underdrains shall conform to section 601.04 of the Illinois Department of Transportaion Standard pecifications for Road and Bridge Construction.*
2. *Pipe material shall be 6" perforated PVC, per article 1040.03 of the IDOT Standard Specifications.*
3. *The underdrains shall be installed just below the bottom of the existing curb (or as necessary to provide positive flow), with the drain perforations down. All underdrains shall be held in the center of the trench by mechanical means while placing compacted trench backfill of washed CA-7.*
4. *After the underdrain pipe is installed, the geotextile shall be folded over the underdrain aggregate and overlapped a minimum of 12".*
5. *The underdrains shall have watertight joints, and be tied into the nearest storm sewer inlet, as designated by the Village.*

CURB UNDERDRAIN DETAIL - Front of Curb		
Underdrain-fc.dwg	STREET & PAVEMENT	DATE: 11/13/2008
DRAWN BY:		REVISED:
Village of Orland Park		REVISED: 2-1-4-08 cjr
Public Works Department		DRAWING NO. STR-_____

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(847) 823-0500

CLIENT:

Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

NO.	DATE	NATURE OF REVISION	CHKD.

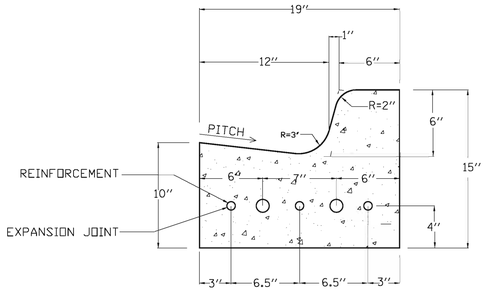
FILE NAME N:\ORLANDPARK\12021\CIVIL\DET_12021.SHT

DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:

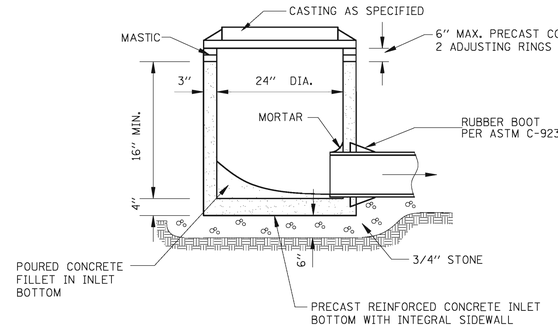
CREEKSIDE SUBDIVISION SOUTH DRAINAGE DETAILS

PROJ. NO.	120213
DATE:	04/26/13
SHEET	8 OF 9
DRAWING NO.	DET



NOTES:
1. REINFORCEMENT SHALL BE THREE (3) #5 REINFORCING BARS CONTINUOUS BETWEEN EXPANSION EXPANSION JOINTS, WITH LOCATION SPACING AS INDICATED ABOVE.
2. EXPANSION JOINT: 3/4" THICK BITUMINOUS FILLER MATERIAL- PROVIDE TWO (2) #6 X 24" SMOOTH BARS WITH EXPANSION CAPS AT EACH EXPANSION JOINT. INSTALL AT ENDS OF ALL RADII AND NO FURTHER THAN SIXTY (60') FEET APART.
3. SAW THREE (3) EQUALLY SPACED CONTRACTION JOINTS AT TWENTY (20') FEET INTERVALS BETWEEN EXPANSION JOINTS. CONTRACTION JOINTS SHALL BE SAW-CUT IN THE UPPER ONE-THIRD OF CURB AND GUTTER WITHIN 3 DAYS OF PLACEMENT.
4. COST OF BARS SHALL BE INCLUDED IN THE UNIT PRICE (PER LINEAL FOOT) FOR CURB AND GUTTER.

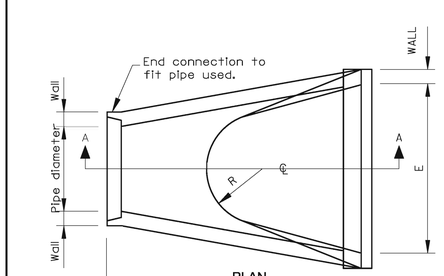
B – 6.12 CURB AND GUTTER		
B-612.DWG	STREET & PAVEMENT	DATE:
DRAWN BY:		REVISED:
Village of ORLAND PARK		REVISED: 2-14-08 RF
		REVISED: 2-6-08 KTL
Engineering Department		DRAWING NO. STR-04



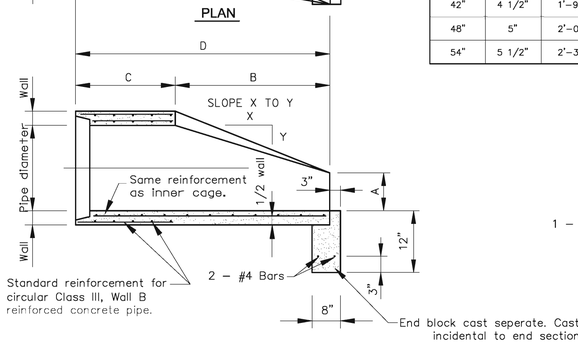
NOTES:

1. Adjustment: Any structure located within pavement shall require the use of at least one (1) rubber adjustment riser, Infra-Riser brand or approved equal, and, if necessary, said riser shall be of the tapered type in order to match the proposed grade of the roadway. No more than two (2) precast concrete adjusting rings with six (6) inch maximum height adjustment shall be allowed. Adjustments within pavement that are less than three (3) inches in height shall consist of only rubber adjustment riser(s). The minimum thickness of a rubber adjustment riser shall be one (1) inch. Adjustments within pavement greater than three (3) inches in height shall use a minimum three (3) inch precast concrete riser for the lower riser, and the final riser shall be of the rubber type.
2. Pipe and frame seals: All pipe connection openings shall be precast with resilient rubber water tight pipe to manhole sleeves or seals conforming to ASTM C-923. Adapter chimney seal with twelve (12) inch sleeve type shall extend from the manhole cone to the manhole frame for all structures in the right-of-way.
3. Sealing: All non-rubber mating surfaces, exterior joints of frames, adjustment riser(s), flat slab top or cone section (if applicable) and structure section shall be sealed with a uniform application of bituminous mastic sealant. The mating surfaces of all rubber Adjustment risers shall be sealed with the manufacturer's recommended sealant for rubber adjustment risers. If multiple adjustment risers are required, a continuous application of sealant shall be applied between each unit. Interior surfaces shall be sealed with concrete mortar or epoxy mortar. Concrete mortar or epoxy mortar will not be used on mating surfaces as a sealant between adjustment risers, structure sections or frames
4. All bottom sections shall be monolithically precast including bases and invert flowlines.
5. Provide CA-6 aggregate backfill around inlet to subgrade elevation in paved areas.for subgrade.

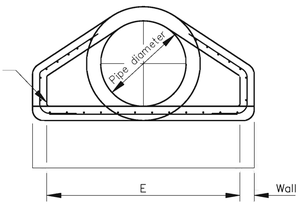
INLET TYPE A		
INLET_A.DWG	STORM SEWER IMPROVEMENT	DATE:
DRAWN BY:		REVISED:
Village of ORLAND PARK		REVISED:
		REVISED:
Engineering Department		DRAWING NO. STS-05



PIPE DIA.	WALL	A	B	C	D	E	R	SLOPE
12"	2"	4"	2'-0"	4'-7/8"	6'-7/8"	2'-0"	9"	3:1
15"	2 1/4"	6"	2'-3"	3'-10"	6'-1"	2'-6"	11"	3:1
18"	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	12"	3:1
21"	2 3/4"	9"	2'-11"	3'-2"	6'-1"	3'-6"	13"	3:1
24"	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	14"	3:1
27"	3 1/4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	14 1/2"	3:1
30"	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	15"	3:1
33"	3 3/4"	1'-1 1/2"	4'-10 1'2"	3'-3 1/4"	8'-1 3/4"	5'-6"	17 1/2"	3:1
36"	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	20"	3:1
42"	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	22"	3:1
48"	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	22"	3:1
54"	5 1/2"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	24"	2.4:1



LONGITUDINAL SECTION



END VIEW

NOTES

PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF A.A.S.H.O. M-170 CLASS III, WALL B REINFORCED CONCRETE PIPE.

PRECAST CONCRETE FLARED END SECTION FOR PIPE DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.

FLARED END SECTIONS 12 INCHES OR GREATER WILL REQUIRE GRATES.

PRECAST REINFORCED CONCRETE FLARED END SECTION		
FLRDEND.DWG	STORM SEWER IMPROVEMENT	DATE:
DRAWN BY:		REVISED:
Village of ORLAND PARK		REVISED:
		REVISED:
Engineering Department		DRAWING NO. STS-08

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CLIENT:
Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

NO.	DATE	NATURE OF REVISION	CHKD.
FILE NAME	N:\ORLANDPARK\120213\Civil\DET02_120213.SHT		

DSGN.	NM
DWN.	PDR
CHKD.	JGS
SCALE:	
PLOT DATE:	9/11/2013
CAD USER:	nmorel
MODEL:	Default

TITLE:
CREEKSIDE SUBDIVISION SOUTH DRAINAGE DETAILS

PROJ. NO.	120213
DATE:	04/26/13
SHEET	9 OF 9
DRAWING NO.	DET