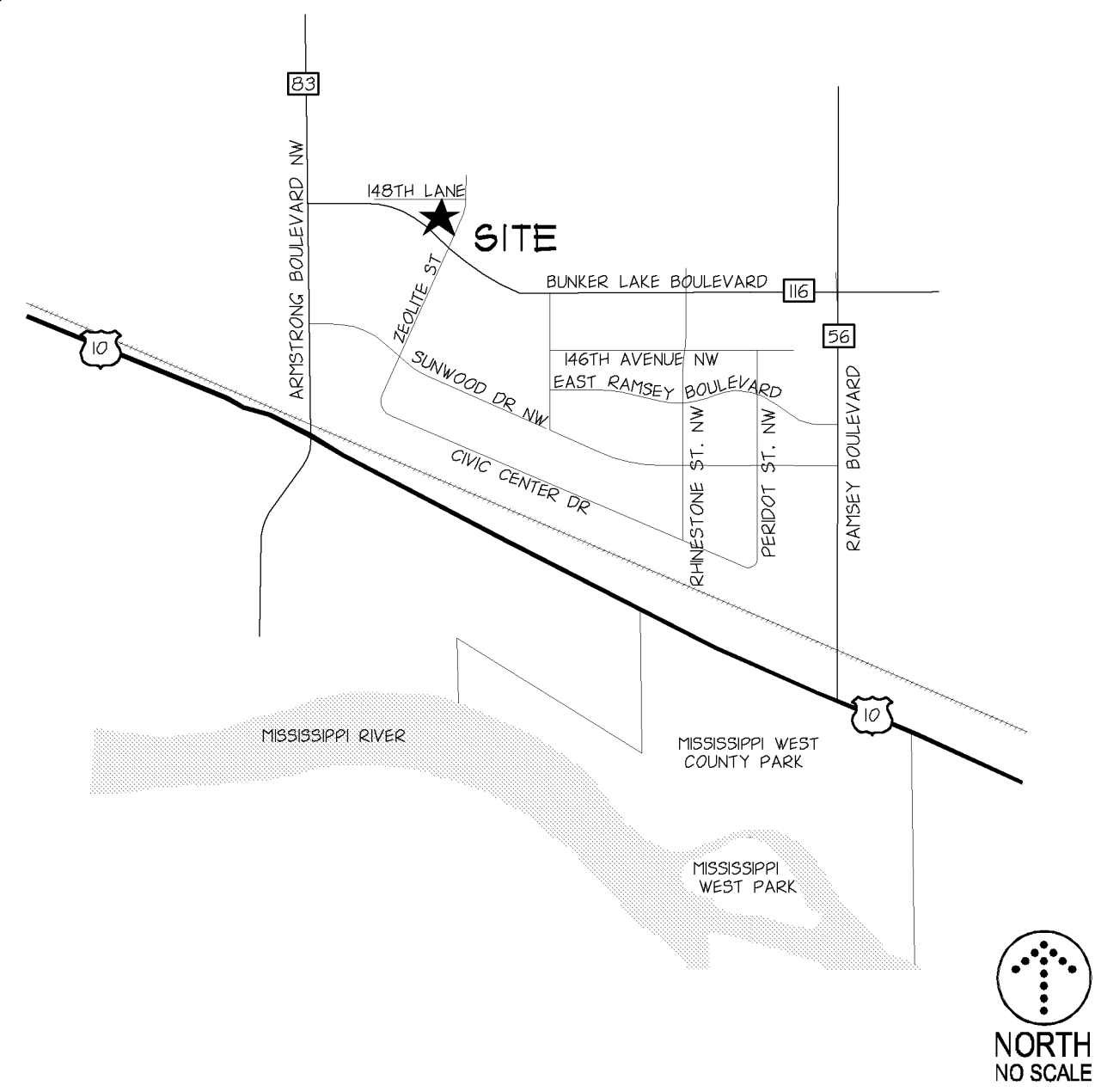


RAMSEY, MN

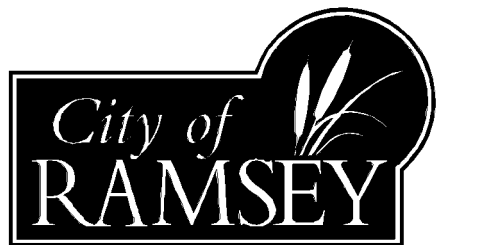


# NORTH COMMONS RAMSEY, MN

DEVELOPER

**RAMSEY HRA**  
7560 SUNWOOD DRIVE  
RAMSEY, MN 55303  
TEL (763) 427-1410 - FAX (763) 427-5543

MUNICIPALITY



PROJECT  
**NORTH COMMONS  
(COR THREE)**  
RAMSEY, MINNESOTA

SHEET INDEX	
BREF	TITLE
C0.1	CIVIL TITLE SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEMOLITION PLAN
C2.1	SITE PLAN
C3.1	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C3.2	SWPPP NOTES
C4.1	UTILITIES
C7.1	CIVIL CONSTRUCTION DETAILS
C7.2	CIVIL CONSTRUCTION DETAILS
C7.3	CIVIL CONSTRUCTION DETAILS
L2.1	LANDSCAPE PLAN

ABBREVIATIONS

D	Angle	JT.	Joint
&	And	L.F.	Lineal Feet
100 YR.	100 Year Flood Elevation	L.P.	Low Point / Liquid Petroleum
A.B.	Anchor Bolt	L.B.	Pound
A.D.	Area Drain	L.G.U.	Local Government Unit
A/C	Ar Conditionng Unit	LONG.	Longitudinal
ADD.	Addendum	LT.	Light / Lighting
ADDL.	Additional	MAINT.	Maintenance
ADJ.	Adjacent / Adjust	MAS.	Masonry
AHU	Air Handling Unit	MATL.	Material
ALT.	Alternate	MECH.	Mechanical
ALUM.	Aluminum	MED.	Medium
ANOD.	Anodized	MFR.	Manufacturer
APPROX.	Approximate	M-I	Manhole
ARCH.	Architect / Architectural	MN.	Minnesota
AUTO.	Automatic	MISC.	Miscellaneous
AVC.	Average	MNDOT	Minnesota Department of Transportation
B.C.	Back of Curb	MOD.	Module / Modular
B.M.	Benchmark	M.L.	Million
B/W	Bottom of Wall	N.	North
BPE	Basement Floor Elevation	N.I.C.	Not In Contract
BIF	Biolumines (Asphotic)	N.	Number
BLDC	Building	NTS	Not to Scale
BSMT.	Basement	NWE	Normal Water Elevation
C.F.	Cubic Feet	NWL	Normal Water Level
C.F.S.	Cubic Feet Per Second	O.C.	On Center
C.G.	Centerline	O.D.	Outside Dimension
C.I.	Centerline	O.E.	Overhead Electric
C.I.U.	Concrete Masonry Unit	O.H.	Ordinary High Water Level
C.O.	Cleanout	O.H.W.L.	Opening
C.O.E.	Cubic Yards	OPNG.	Opening
C.V.	Catch Basin	P.C.	Point of Curvature
CB	Catch Basin Manhole	P.I.	Point of Intersection
CBM	Cement	P.I.V.	Post Indicator Valve
CP	Cast Iron Pipe	P.L. OR P/L	Property Line
CNP	Corrugated Metal Pipe	P.O.B.	Pounds of Bequmq
CONC.	Concrete (Portland)	P.S.F.	Pounds Per Square Foot
CONN.	Connection	P.S.I.	Pounds Per Square Inch
CONSTR.	Construction	P.T.	Point of Tangency
CONT.	Continuous	P.V.C.	Point of Vertical Curvature
CONTR.	Contractor	P.V.T.	Point of Vertical Intersection
COP.	Copper	P.V.T.	Point of Vertical Tangency
CU.	Cup	PE	Polyethylene
D.S.	Down Spout	PED.	Pedestal / Pedestrian
DEG.	Denotation / Demolish	PERF.	Preparation
DEMO.	Department	PREL.	Proposed
DEPT.	Detail	PROP.	Proposed
DET.	Diameter	PVC	Poly-Vinyl-Chloride (Pipng)
DIA.	Diameter	PVMT	Pavement
DIAG.	Diagram	QTR.	Quarter
DIM.	Dimension	QTY.	Quantity
DIP	Ductile Iron Pipe	R	Radius
DN	Down	RAD.	Radius
DWG.	Drawing	R.D.	Roof Drain
E.	East	R.E.	Remove Existing
E.I.	Expansion Joint	R.O.	Rough Opening
E.O.S.	Emergency Overflow Swale	R.P.	Rough Point
E.W.	Each Way	R.C.P.	Reinforced Concrete Pipe
EA.	Each	R.S.	Rough Slab
EL.	Elevation	RE	Reinforce
ELEC.	Electrical	REINF.	Reinforced
EMER.	Emergency	REQD	Required
ENGR.	Entrance	REV.	Revision / Revised
ENTR.	Entrance	RGU	Regulatory Government Unit
EQ.	Equal	R/W OR R/W	Right of Way
EQUIP.	Equipment	S	Square Feet
EQUIV.	Equivalent	S.F.	Square Feet
EXIST.	Existing	SANL	Sanitary Sewer
EXP.	Expansion	SE	Side Exit
F. & I	Furnish and Install	SEWO	Side Exit Walk Out
F.B.O.	Furnished by Others	SHT.	Sheet
F.C.	Face of Curb	SM	Smear
F.D.	Floor Drain	SPEC.	Specification
F.D.C.	Fire Department Connection	SP	Specification
F.V.	Field Verify	SQ	Square
FB	Full Basement	STH	Storm Sewer Manhole
FBWO	Full Basement Walk Out	STD.	Standard
FBLO	Full Basement Look Out	STRUC.	Structural
FDN.	Foundation	SYM.	Symbol
FES	Flared End Section	T	Thickness
FFE	Finished Floor Elevation	T/R	Top of Rim
FLR.	Floor	T/W	Top of Wall
FT. OR ( )	Foot	TEMP.	Temporary
FUT.	Future	THK.	Thick / Thickness
G.B.	Grade Break	TNH	Top Nut Hydrant
G.C.	General Contractor	TY.	Typical
GALL.	Gallon	UNO.	Unless Noted Otherwise
GALV.	Galvanized	V.B.	Vapor Barrier
GFE	Gross Floor Elevation	V.C.	Vertical Curve
CL.	Class	V.F.	Verify in Field
CR.	Class	VER.	Verify
H.	Height	VERT.	Vertical
H.P.	High Point	VEST.	Vestibule
HDPPEP	High Density Polyethylene Pipe	W	Width
HGT.	Height	W.P.T.	Welding Plant
HORIZ.	Horizontal	W.W.F.	Welded Wire Fabric
HVAC	Heating Ventilation, Air Conditioning	W/O	Without
HYD	Hydrant	WQ	Walk Out
I.D.	Inside Dimension	WETL.	Wetland
I.N. OR ( )	Inches	WP	Waterproof
INFO.	Information	WT.	Weight
INSUL.	Insulation	YD.	Yard
INV.	Invert Elevation	Yr.	Year

SYMBOLS

EXISTING	DESCRIPTION	NEW	DESCRIPTION
	CONTOUR		CONTOUR
	SPOT ELEVATION		SPOT ELEVATION
	BUILDING		BUILDING
	CANOPY / OVERHANG		UNDERGROUND STRUCTURE
	CONCRETE		CONCRETE
	CONCRETE CURB		CONCRETE CURB
	EDGE OF PAVEMENT		EDGE OF PAVEMENT
	FENCING		FENCING
	GUARD RAIL		GUARD RAIL
	CONCRETE RETAINING WALL		CONCRETE RETAINING WALL
	FELDSTONE RETAINING WALL		FELDSTONE RETAINING WALL
	MODULAR RETAINING WALL		MODULAR RETAINING WALL
	SOIL BORING		DOORWAY
	LIGHT POLE		LIGHT STANDARD
	TREES		POWER POLE
	DENOTES TREE LIMITS		SLOPE, DIRECTION OF FLOW
	MANHOLE		BOLLARD
	CATCH BASIN		STORM SEWER
	FIRE HYDRANT		SANITARY SEWER-WASTE
	WATER VALVE		FORCE MAN
	FLARED END SECTION		ROOF DRAIN COLLECTOR
	IRON MONUMENT FOUND		WATER MAN
	IRON PIPE MONUMENT SET		FIRE LINE (IF SEPARATE)
	P.K. NAL		FIRE DEPARTMENT CONNECTION
	POWERPOLE		DOMESTIC WATER SERVICE
	GUARD POST		CULVERT & END SECTION
	UTILITY BOX (TV, TEL, ELEC)		GAS LINE
	GAS METER		SOL SUBDRAN
	TRAFFIC BOX		ELECTRIC-OVERHEAD
	GAS METER		ELECTRIC-UNDERGROUND
	TRAFFIC SIGN		TELEPHONE-OVERHEAD
	GUY WIRE		TELEPHONE-UNDERGROUND
	REGISTRAR OF TITLES		UNDERGROUND CABLE/TV
	COUNTY RECORDER		UNDERGROUND CABLE/TV
	STORM SEWER LINE		LAWN SPRINKLER SLEEVE
	SANITARY SEWER LINE		
	WATER MAN		
	UNDERGROUND GAS		
	OVERHEAD TELEPHONE		
	UNDERGROUND TELEPHONE		
	UNDERGROUND ELECTRIC		
	OVERHEAD ELECTRIC		
	UNDERGROUND ELECTRIC T.V.		
	OVERHEAD CABLE T.V.		
	WELL		
	RESTRICTED ACCESS		
	NOTE NUMBER		
	DENOTES BITUMINOUS SURFACE		

EROSION CONTROL SYMBOLS

SYMBOL	DESCRIPTION
	SILT FENCE
	CONSTRUCTION LIMITS
	INLET PROTECTION

DRAWING SYMBOLS

SYMBOL	DESCRIPTION
	NOTE REFERENCE
	PARKING STALL COUNT
	LARGE SHEET DETAIL
	COORDINATE POINT
	REVISED AREA - ADDENDUM, BULLETIN, ETC.
	REVISED AREA (THIS ISSUE)

BENCHMARKS

**PROJECT BENCHMARK:**  
COR CONTROL POINT: "COR-ARM"  
CONTROL POINT LOCATED AT THE NORTHWEST QUADRANT OF ARMSTRONG BOULEVARD NW AND BUNKER LAKE BOULEVARD NW.  
ELEVATION = 868.32 (NGVD 29)

**SITE BENCHMARK:**  
TOP NUT OF FIRE HYDRANT  
LOCATION: NORTHEAST QUADRANT OF ZEGLITE STREET NW AND BUNKER LAKE BOULEVARD NW.  
ELEVATION = 873.80 (NGVD 29)

CITY NOTES

- SITE GRADING, LANDSCAPING AND UTILITY INSTALLATIONS MUST BE COMPLETED AS SHOWN WITHOUT ALTERATION. DEVIATIONS FROM PLANS MUST BE CHECKED AND APPROVED BY THE ENGINEERING DEPARTMENT AND/OR THE PLANNING COMMISSION PRIOR TO SAD CHANGE.
- REQUIRED EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS AS SHOWN.
- MAN JOB-SITE ENTRANCE MUST BE POSTED WITH THE PROJECT ADDRESS SO THAT IT IS CLEARLY VISIBLE FROM THE STREET. JOB-SITE ADDRESS SIGN MUST BE INSTALLED IN PLACE UNTIL FINAL OCCUPANCY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND MARK ALL EXISTING UTILITIES 72 HOURS BEFORE CONSTRUCTION STARTS. THE ENGINEER, ARCHITECT, OR OWNER DOES NOT GUARANTEE THAT ALL UTILITIES ARE MAPPED OR IF MAPPED, ARE SHOWN CORRECTLY. CONTACT ONE CALL AT 811 FOR FIELD LOCATING EXISTING UTILITIES. CONTACT UTILITY OWNER IF DAMAGE OCCURS DUE TO CONSTRUCTION.

PROPOSED LEGAL DESCRIPTION

COR THREE, ANOKA COUNTY, MINNESOTA.

SHEET INDEX

C0.1	CIVIL TITLE SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEMOLITION PLAN
C2.1	SITE PLAN
C3.1	GRADING, DRAINAGE, PAVING, & EROSION CONTROL
C3.2	SWPPP NOTES
C4.1	UTILITIES
C7.1	CIVIL CONSTRUCTION DETAILS
C7.2	CIVIL CONSTRUCTION DETAILS
C7.3	CIVIL CONSTRUCTION DETAILS
L1.1	LANDSCAPE PLAN

REVISION HISTORY

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAN SUBMITTAL	CHC
03 JUL 2012	CITY PERMIT SUBMITTAL	CHC

PROJECT MANAGER REVIEW

CERTIFICATION

NOT FOR CONSTRUCTION



Know what's Below.  
Call before you dig.

CITY PERMIT SUBMITTAL

3 JULY 2012

From Site to Finish

105 South Fifth Avenue Tel: 612-252-9070  
Suite 513 Fax: 612-252-9077  
Minneapolis, MN 55401 Web: landform.net


FILE NAME C001RAM021.DWG  
PROJECT NO. RAM12021/1RAM12024

CIVIL TITLE SHEET

**C0.1**



**DEVELOPER**  
**RAMSEY HRA**  
 7500 SUNWOOD DRIVE  
 RAMSEY, MN 55303  
 TEL (763) 427-1410 - FAX (763) 427-5543

**MUNICIPALITY**  
  
**CITY OF RAMSEY**

**PROJECT**  
**NORTH COMMONS (COR THREE)**  
 RAMSEY, MINNESOTA

**SHEET INDEX**

SHEET	TITLE
C0.1	CIVIL TITLE SHEET
C1.1	EXISTING CONDITIONS
C2.1	DEVELOPMENT PLAN
C2.2	SITE PLAN
C3.1	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C3.2	SWPPP NOTES
C4.1	UTILITIES
C7.1	CIVIL CONSTRUCTION DETAILS
C7.2	CIVIL CONSTRUCTION DETAILS
C7.3	CIVIL CONSTRUCTION DETAILS
L2.1	LANDSCAPE PLAN

**REVISION HISTORY**  
 CONTACT ENGINEER FOR ANY PRIOR HISTORY

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAN SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC

**PROJECT MANAGER REVIEW**  
 \_\_\_\_\_  
 \_\_\_\_\_

**CERTIFICATION**  
 \_\_\_\_\_  
 \_\_\_\_\_

**NOT FOR CONSTRUCTION**

**CITY PERMIT SUBMITTAL**  
 3 JULY 2012

**LANDFORM**  
 From Site to Finish

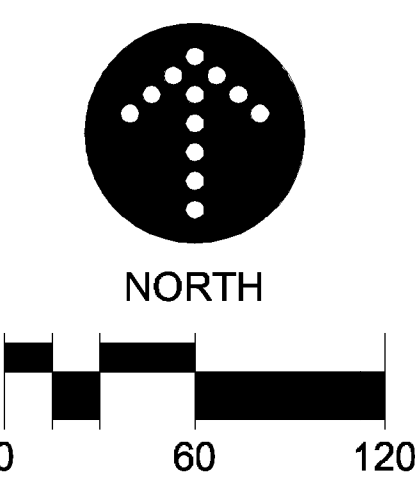
105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

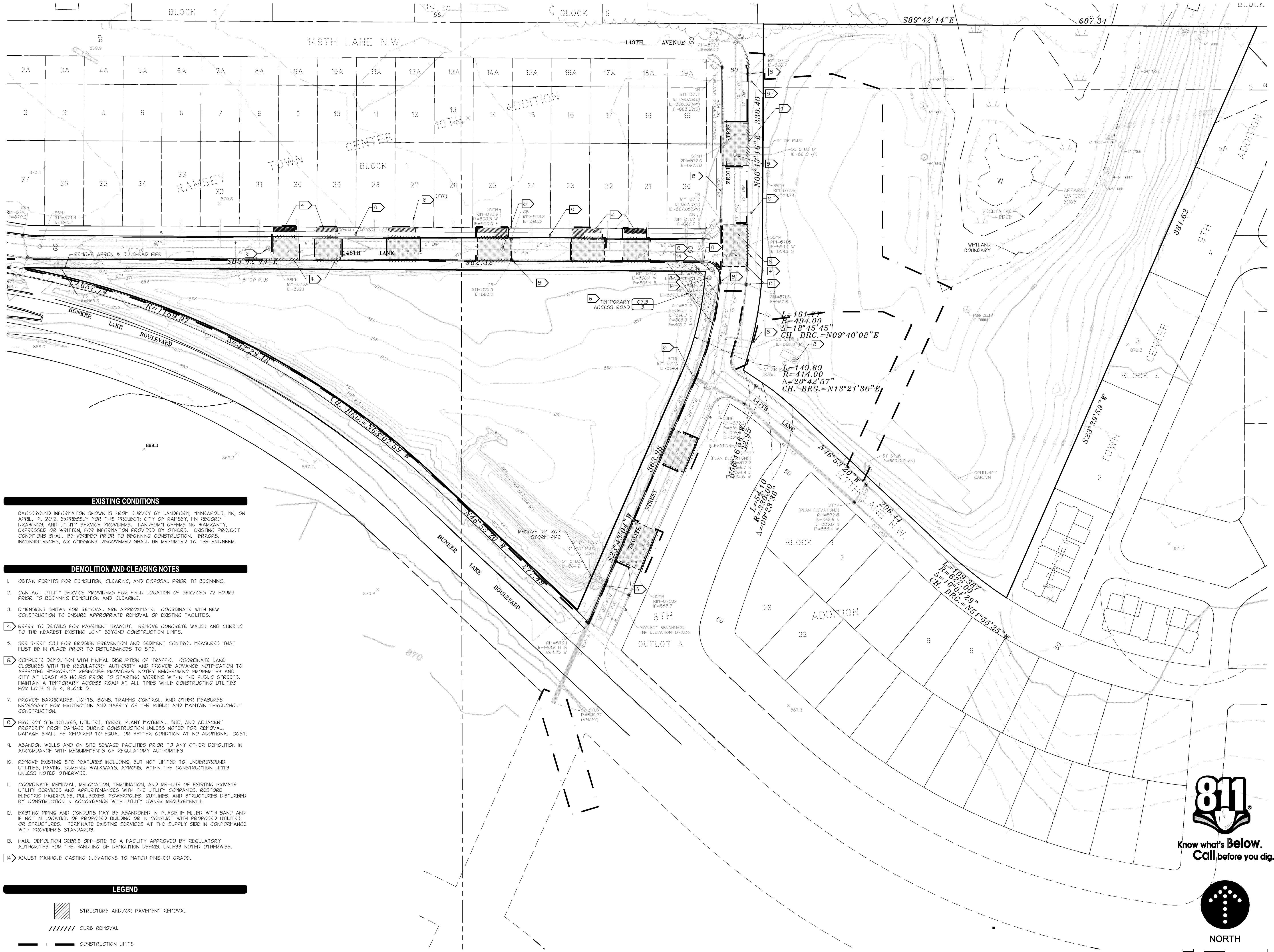
FILE NAME C:\01RAM\021.DWG  
 PROJECT NO. RAM12021\RAM12024

**EXISTING CONDITIONS**  
**C1.1**

**EXISTING CONDITIONS**

1. BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY LANDFORM, MINNEAPOLIS, MN, ON APRIL 14, 2012, EXPRESSLY FOR THIS PROJECT; CITY OF RAMSEY, MN RECORD DRAWINGS, AND UTILITY SERVICE PROVIDERS. LANDFORM OFFERS NO WARRANTY, EXPRESSED OR WRITTEN, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER.





**EXISTING CONDITIONS**

BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY LANDFORM MINNEAPOLIS, MN, ON APRIL 18, 2012, EXPRESSLY FOR THIS PROJECT, CITY OF RAMSEY, MN RECORD DRAWINGS, AND UTILITY SERVICE PROVIDERS. LANDFORM OFFERS NO WARRANTY, EXPRESSED OR WRITTEN, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER.

**DEMOLITION AND CLEARING NOTES**

1. OBTAIN PERMITS FOR DEMOLITION, CLEARING, AND DISPOSAL PRIOR TO BEGINNING.
2. CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING DEMOLITION AND CLEARING.
3. DIMENSIONS SHOWN FOR REMOVAL ARE APPROXIMATE. COORDINATE WITH NEW CONSTRUCTION TO ENSURE APPROPRIATE REMOVAL OF EXISTING FACILITIES.
4. REFER TO DETAILS FOR PAVEMENT SAWCUT. REMOVE CONCRETE WALKS AND CURBING TO THE NEAREST EXISTING JOINT BEYOND CONSTRUCTION LIMITS.
5. SEE SHEET C3.1 FOR EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT MUST BE IN PLACE PRIOR TO DISTURBANCES TO SITE.
6. COMPLETE DEMOLITION WITH MINIMAL DISRUPTION OF TRAFFIC. COORDINATE LANE CLOSURES WITH THE REGULATORY AUTHORITY AND PROVIDE ADVANCE NOTIFICATION TO AFFECTED EMERGENCY RESPONSE PROVIDERS, NOTIFY NEIGHBORING PROPERTIES AND CITY AT LEAST 48 HOURS PRIOR TO STARTING WORKING WITHIN THE PUBLIC STREETS. MAINTAIN A TEMPORARY ACCESS ROAD AT ALL TIMES WHILE CONSTRUCTING UTILITIES FOR LOTS 3 & 4, BLOCK 2.
7. PROVIDE BARRICADES, LIGHTS, SIGNS, TRAFFIC CONTROL, AND OTHER MEASURES NECESSARY FOR PROTECTION AND SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION.
8. PROTECT STRUCTURES, UTILITIES, TREES, PLANT MATERIAL, SOD, AND ADJACENT PROPERTY FROM DAMAGE DURING CONSTRUCTION UNLESS NOTED FOR REMOVAL. DAMAGE SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION AT NO ADDITIONAL COST.
9. ABANDON WELLS AND ON SITE SEWAGE FACILITIES PRIOR TO ANY OTHER DEMOLITION IN ACCORDANCE WITH REQUIREMENTS OF REGULATORY AUTHORITIES.
10. REMOVE EXISTING SITE FEATURES INCLUDING, BUT NOT LIMITED TO, UNDERGROUND UTILITIES, PAVING, CURBING, WALKWAYS, APRONS, WITHIN THE CONSTRUCTION LIMITS UNLESS NOTED OTHERWISE.
11. COORDINATE REMOVAL, RELOCATION, TERMINATION, AND RE-USE OF EXISTING PRIVATE UTILITY SERVICES AND APPURTENANCES WITH THE UTILITY COMPANIES. RESTORE ELECTRIC HANDHOLES, PULLBOXES, POWERPOLES, CUYLINES, AND STRUCTURES DISTURBED BY CONSTRUCTION IN ACCORDANCE WITH UTILITY OWNER REQUIREMENTS.
12. EXISTING PIPING AND CONDUITS MAY BE ABANDONED IN-PLACE IF FILLED WITH SAND AND IF NOT IN LOCATION OF PROPOSED BUILDING OR IN CONFLICT WITH PROPOSED UTILITIES OR STRUCTURES. TERMINATE EXISTING SERVICES AT THE SUPPLY SIDE IN CONFORMANCE WITH PROVIDER'S STANDARDS.
13. Haul demolition debris off-site to a facility approved by regulatory authorities for the handling of demolition debris, unless noted otherwise.
14. ADJUST MAN-HOLE CASTING ELEVATIONS TO MATCH FINISHED GRADE.

**LEGEND**

- STRUCTURE AND/OR PAVEMENT REMOVAL
- CURB REMOVAL
- CONSTRUCTION LIMITS
- SAW CUT

**DEVELOPER**  
**RAMSEY HRA**  
 7560 SUNWOOD DRIVE  
 RAMSEY, MN 55303  
 TEL (763) 427-1410 - FAX (763) 427-5543

**MUNICIPALITY**  
  
**CITY OF RAMSEY**

**PROJECT**  
**NORTH COMMONS (COR THREE)**  
 RAMSEY, MINNESOTA

**SHEET INDEX**

SHEET	TITLE
C0.1	CIVIL TITLE SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEMOLITION PLAN
C2.1	SITE PLAN
C3.1	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C3.2	SWPPP NOTES
C4.1	UTILITIES
C7.1	CIVIL CONSTRUCTION DETAILS
C7.2	CIVIL CONSTRUCTION DETAILS
C7.3	CIVIL CONSTRUCTION DETAILS
L2.1	LANDSCAPE PLAN

**REVISION HISTORY**  
 CONTACT ENGINEER FOR ANY PRIOR HISTORY

DATE	REVISION	CHK	APP
06 JUN 2012	PRELIMINARY PLAN SUBMITTAL	CNC	
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC	

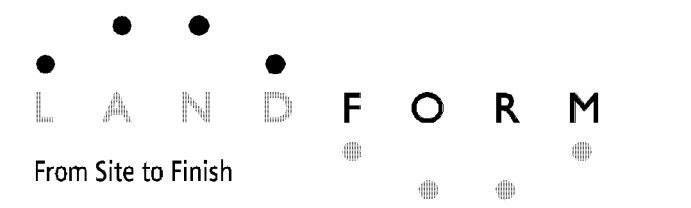
**PROJECT MANAGER REVIEW**

**CERTIFICATION**

**NOT FOR CONSTRUCTION**

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED UNAUTHORIZEDLY. READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

**CITY PERMIT SUBMITTAL**  
 3 JULY 2012



105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

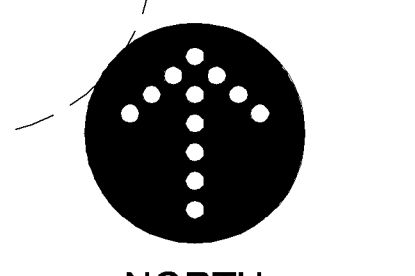
FILE NAME C:\01RAM\021.DWG  
 PROJECT NO. RAM12021\RAM12024

**DEMOLITION PLAN**

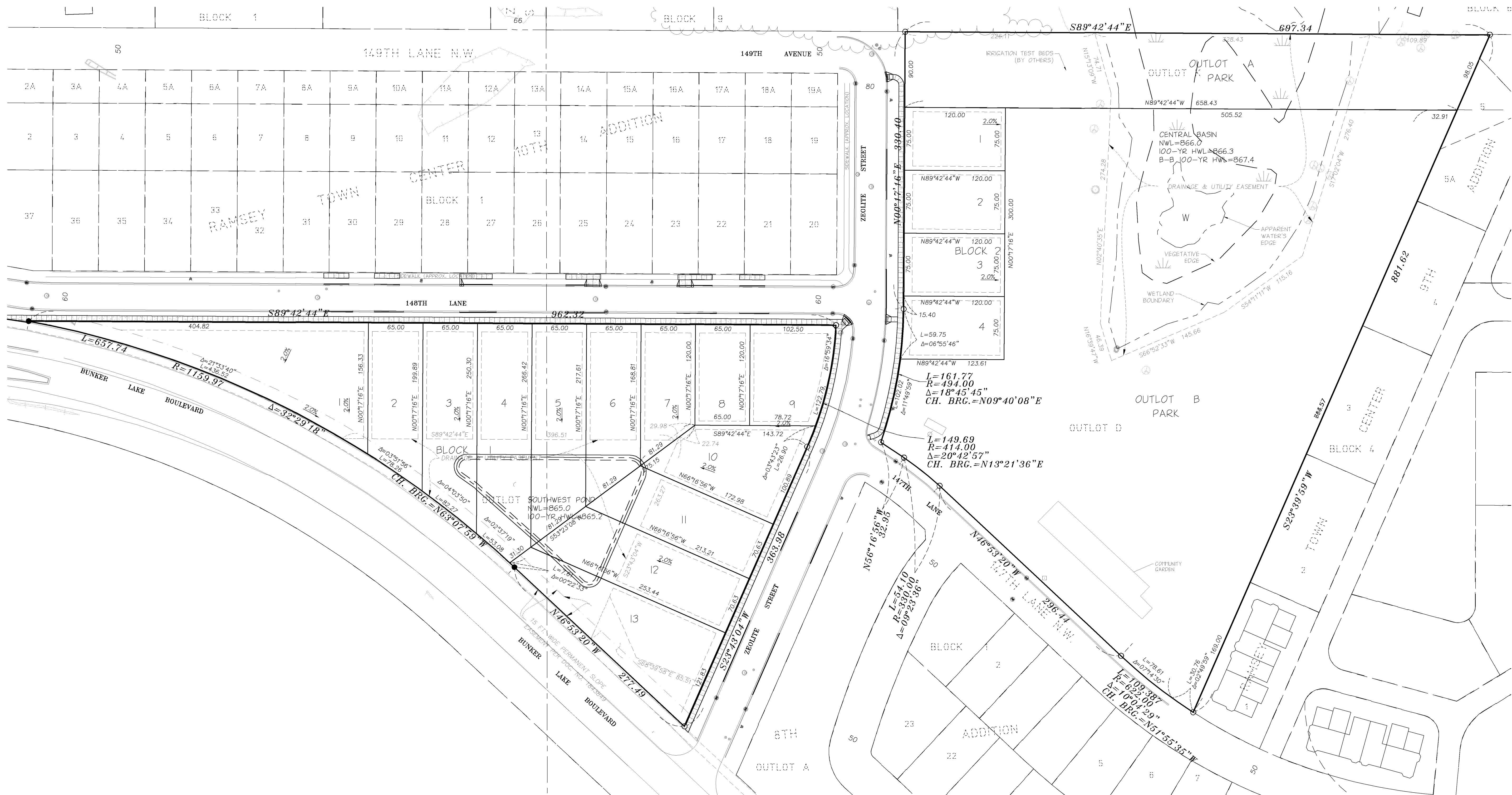
**C1.2**



Know what's Below.  
 Call before you dig.



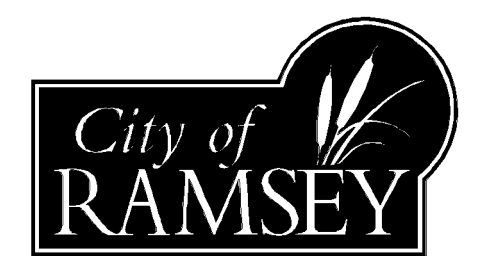
0 60 120



DEVELOPER

**RAMSEY HRA**  
 7550 SUNWOOD DRIVE  
 RAMSEY, MN 55303  
 TEL (763) 427-1410 - FAX (763) 427-5543

MUNICIPALITY



PROJECT  
**NORTH COMMONS  
 (COR THREE)**  
 RAMSEY, MINNESOTA

SHEET INDEX

SHEET	TITLE
C01	CIVIL TITLE SHEET
C11	EXISTING CONDITIONS
C12	DEVELOPMENT PLAN
C21	SITE PLAN
C22	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C32	SWPPP NOTES
C41	UTILITIES
C71	CIVIL CONSTRUCTION DETAILS
C72	CIVIL CONSTRUCTION DETAILS
C73	CIVIL CONSTRUCTION DETAILS
L21	LANDSCAPE PLAN

REVISION HISTORY

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAT SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC

PROJECT MANAGER REVIEW

CERTIFICATION

**EXISTING CONDITIONS**

BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY LANDFORM, MINNEAPOLIS, MN, ON APRIL 19, 2012, EXPRESSLY FOR THIS PROJECT. CITY OF RAMSEY, MN RECORD DRAWINGS, AND UTILITY SERVICE PROVIDERS. LANDFORM OFFERS NO WARRANTY, EXPRESSED OR WRITTEN, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER.

**EXISTING LOT AREAS**

OUTLOT D, RAMSEY TOWN CENTER, EIGHTH ADDITION- 31651 SQ. FT. OR 7.15 ACRES  
 OUTLOT F, RAMSEY TOWN CENTER, EIGHTH ADDITION- 19,707 SQ. FT. OR 4.38 ACRES  
 OUTLOT K, RAMSEY TOWN CENTER, EIGHTH ADDITION- 61,010 SQ. FT. OR 1.40 ACRES  
 TOTAL - 563,368 SQ. FT. OR 12.93 ACRES

**PROPOSED LOT AREAS**

LOT 1, BLOCK 1, COR THREE	- 25,708 SQ. FT.
LOT 2, BLOCK 1, COR THREE	- 11,943 SQ. FT.
LOT 3, BLOCK 1, COR THREE	- 14,591 SQ. FT.
LOT 4, BLOCK 1, COR THREE	- 17,549 SQ. FT.
LOT 5, BLOCK 1, COR THREE	- 15,731 SQ. FT.
LOT 6, BLOCK 1, COR THREE	- 12,559 SQ. FT.
LOT 7, BLOCK 1, COR THREE	- 9,386 SQ. FT.
LOT 8, BLOCK 1, COR THREE	- 7,500 SQ. FT.
LOT 9, BLOCK 1, COR THREE	- 11,244 SQ. FT.
LOT 10, BLOCK 1, COR THREE	- 14,606 SQ. FT.
LOT 11, BLOCK 1, COR THREE	- 13,639 SQ. FT.
LOT 12, BLOCK 1, COR THREE	- 16,480 SQ. FT.
LOT 13, BLOCK 1, COR THREE	- 19,826 SQ. FT.
LOT 1, BLOCK 2, COR THREE	- 9,000 SQ. FT.
LOT 2, BLOCK 2, COR THREE	- 9,000 SQ. FT.
LOT 3, BLOCK 2, COR THREE	- 9,000 SQ. FT.
LOT 4, BLOCK 2, COR THREE	- 9,072 SQ. FT.
OUTLOT A, COR THREE	- 58,048 SQ. FT.
OUTLOT B, COR THREE	- 2,962 SQ. FT.
OUTLOT C, COR THREE	- 19,369 SQ. FT.
OUTLOT D, COR THREE	- 257,210 SQ. FT.
TOTAL	- 563,368 SQ. FT.

NOT FOR CONSTRUCTION

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED FROM A NON-PROOF. READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

**CITY PERMIT SUBMITTAL**  
 3 JULY 2012

LANDFORM  
 From Site to Finish

105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

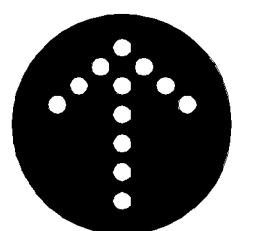
FILE NAME: C:\03RAM\021.DWG  
 PROJECT NO: RAM12021\RAM12024

**SITE PLAN**

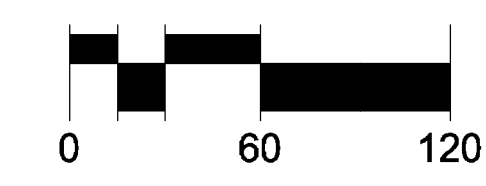
**C2.1**



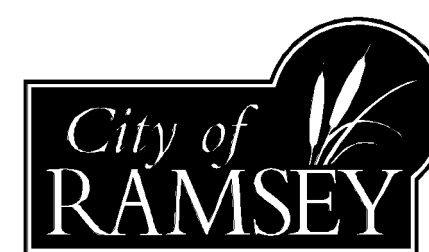
Know what's Below.  
 Call before you dig.



NORTH







SHEET	TITLE
C01	CIVIL TITLE SHEET
C11	EXISTING CONDITIONS
C12	DEMOLITION PLAN
C21	SITE PLAN
C31	GRADING, DRAINAGE, PAVING & EROSION CONTROL SWPPP NOTES
C32	UTILITIES
C71	CIVIL CONSTRUCTION DETAILS
C72	CIVIL CONSTRUCTION DETAILS
C73	CIVIL CONSTRUCTION DETAILS
L01	LANDSCAPE PLAN

OWNER/OPERATOR MAY TERMINATE PERMIT COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

- THE OWNER/OPERATOR(S) MUST ENSURE THAT THE PERMANENT STORM WATER TREATMENT SYSTEM MEETS ALL REQUIREMENTS OF THE PERMIT. THIS INCLUDES BUT IS NOT LIMITED TO: A FINAL CLEAN OUT OF TEMPORARY OR PERMANENT SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS AND FINAL CONSTRUCTION OR MAINTENANCE OF INFILTRATION BASINS. ALL SEDIMENT MUST BE REMOVED FROM CONVEYANCE SYSTEMS AND DITCHES MUST BE STABILIZED WITH PERMANENT COVER.
- PRIOR TO SUBMISSION OF THE NOT, ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE OWNER/OPERATOR IS RESPONSIBLE. BMPs DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.
- FOR RESIDENTIAL CONSTRUCTION ONLY, INDIVIDUAL LOTS ARE CONSIDERED FINALLY STABILIZED IF THE STRUCTURE(S) ARE FINISHED, TEMPORARY EROSION PROTECTION AND DOWNGRADIENT PERIMETER CONTROL HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN SOLD TO THE HOMEOWNER. ADDITIONALLY, THE OWNER/OPERATOR MUST DISTRIBUTE THE MPCA'S HOMEOWNER FACT SHEET TO THE HOMEOWNER TO INFORM THE HOMEOWNER OF THE NEED FOR, AND BENEFITS OF, PERMANENT COVER.
- FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP OR RANGE LAND) FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE.

- CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS.
- AT LEAST 90% (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER ESTABLISHED ON THOSE AREAS.
- ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED.

AND WHERE APPLICABLE:

- FOR RESIDENTIAL CONSTRUCTION ONLY, INDIVIDUAL LOTS ARE CONSIDERED FINALLY STABILIZED IF THE STRUCTURE(S) ARE FINISHED & TEMPORARY EROSION PROTECTION AND DOWNGRADIENT PERIMETER CONTROL HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN SOLD TO THE HOMEOWNER. ADDITIONALLY, THE OWNER/OPERATOR MUST DISTRIBUTE THE MPCA'S HOMEOWNER FACT SHEET TO THE HOMEOWNER TO INFORM THE HOMEOWNER OF THE NEED FOR, AND BENEFITS OF, PERMANENT COVER.
- FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP OR RANGE LAND) FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE.

**REVISION HISTORY**

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAT SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC

**PROJECT MANAGER REVIEW**

BY: [ ] DATE: 07.03.2012

**CERTIFICATION**

NOT FOR CONSTRUCTION

**CITY PERMIT SUBMITTAL**

3 JULY 2012

LANDFORM

From Site to Finish

105 South Fifth Avenue Suite 513 Minneapolis, MN 55401

Tel: 612-252-9070 Fax: 612-252-9077 Web: landform.net

FILE NAME: C302RAM021

PROJECT NO. RAM\2021\RAM\2024

SWPPP NOTES

**C3.2**

**FINAL STABILIZATION**

THE OWNER/OPERATOR(S) MUST ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION REQUIRES ALL OF THE FOLLOWING:

- FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND ALL SOILS MUST BE STABILIZED BY A MINIMUM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE ENTIRE PERVIOUS SURFACE AREA, OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSION CONDITIONS.
- THE OWNER/OPERATOR(S) MUST ENSURE THAT THE PERMANENT STORM WATER TREATMENT SYSTEM MEETS ALL REQUIREMENTS OF THE PERMIT. THIS INCLUDES BUT IS NOT LIMITED TO: A FINAL CLEAN OUT OF TEMPORARY OR PERMANENT SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS AND FINAL CONSTRUCTION OR MAINTENANCE OF INFILTRATION BASINS. ALL SEDIMENT MUST BE REMOVED FROM CONVEYANCE SYSTEMS AND DITCHES MUST BE STABILIZED WITH PERMANENT COVER.
- PRIOR TO SUBMISSION OF THE NOT, ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE OWNER/OPERATOR IS RESPONSIBLE. BMPs DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.
- FOR RESIDENTIAL CONSTRUCTION ONLY, INDIVIDUAL LOTS ARE CONSIDERED FINALLY STABILIZED IF THE STRUCTURE(S) ARE FINISHED, TEMPORARY EROSION PROTECTION AND DOWNGRADIENT PERIMETER CONTROL HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN SOLD TO THE HOMEOWNER. ADDITIONALLY, THE OWNER/OPERATOR MUST DISTRIBUTE THE MPCA'S HOMEOWNER FACT SHEET TO THE HOMEOWNER TO INFORM THE HOMEOWNER OF THE NEED FOR, AND BENEFITS OF, PERMANENT COVER.
- FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP OR RANGE LAND) FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE.

OWNER/OPERATOR MAY TERMINATE PERMIT COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

- THE OWNER/OPERATOR(S) MUST ENSURE THAT THE PERMANENT STORM WATER TREATMENT SYSTEM MEETS ALL REQUIREMENTS OF THE PERMIT. THIS INCLUDES BUT IS NOT LIMITED TO: A FINAL CLEAN OUT OF TEMPORARY OR PERMANENT SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS AND FINAL CONSTRUCTION OR MAINTENANCE OF INFILTRATION BASINS. ALL SEDIMENT MUST BE REMOVED FROM CONVEYANCE SYSTEMS AND DITCHES MUST BE STABILIZED WITH PERMANENT COVER.
- PRIOR TO SUBMISSION OF THE NOT, ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE OWNER/OPERATOR IS RESPONSIBLE. BMPs DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.
- FOR RESIDENTIAL CONSTRUCTION ONLY, INDIVIDUAL LOTS ARE CONSIDERED FINALLY STABILIZED IF THE STRUCTURE(S) ARE FINISHED & TEMPORARY EROSION PROTECTION AND DOWNGRADIENT PERIMETER CONTROL HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN SOLD TO THE HOMEOWNER. ADDITIONALLY, THE OWNER/OPERATOR MUST DISTRIBUTE THE MPCA'S HOMEOWNER FACT SHEET TO THE HOMEOWNER TO INFORM THE HOMEOWNER OF THE NEED FOR, AND BENEFITS OF, PERMANENT COVER.
- FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP OR RANGE LAND) FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE.

- CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS.
- AT LEAST 90% (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER ESTABLISHED ON THOSE AREAS.
- ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED.

AND WHERE APPLICABLE:

- FOR RESIDENTIAL CONSTRUCTION ONLY, INDIVIDUAL LOTS ARE CONSIDERED FINALLY STABILIZED IF THE STRUCTURE(S) ARE FINISHED & TEMPORARY EROSION PROTECTION AND DOWNGRADIENT PERIMETER CONTROL HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN SOLD TO THE HOMEOWNER. ADDITIONALLY, THE OWNER/OPERATOR MUST DISTRIBUTE THE MPCA'S HOMEOWNER FACT SHEET TO THE HOMEOWNER TO INFORM THE HOMEOWNER OF THE NEED FOR, AND BENEFITS OF, PERMANENT COVER.
- FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP OR RANGE LAND) FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE.

**TERMINATION OF COVERAGE**

OWNER/OPERATOR(S) WISHING TO TERMINATE COVERAGE UNDER THIS PERMIT MUST SUBMIT NOTICE OF TERMINATION (NOT) TO THE MPCA. COMPLIANCE WITH THIS PERMIT IS REQUIRED UNTIL A NOT IS SUBMITTED. THE OWNER/OPERATOR(S) COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE POSTMARK DATE OF THE NOT, OR ON THE DATE AN ONLINE NOT IS SUBMITTED TO THE MPCA.

TERMINATION OF COVERAGE FOR THE ENTIRE PROJECT

- OWNER/OPERATOR(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER FINAL STABILIZATION HAS BEEN COMPLETED ON ALL PORTIONS OF THE SITE FOR WHICH THE OWNER/OPERATOR IS RESPONSIBLE AND ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED. IF THE SITE INCLUDES PERMANENT STORM WATER MANAGEMENT SYSTEMS, THE REQUIREMENTS FOR FINAL CLEANOUT/MAINTENANCE MUST BE PERFORMED AS REQUIRED IN FINAL STABILIZATION.
- OWNER/OPERATOR(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING THE ENTIRE SITE INCLUDING ROADS AND STORM WATER INFRASTRUCTURE, AND COVERAGE IS TRANSFERRED TO ANOTHER OWNER AS DESCRIBED IN CHANGE OF COVERAGE.
- TERMINATION OF COVERAGE FOR A PORTION OF THE ENTIRE PROJECT
- TERMINATION OF COVERAGE OBTAINED USING A SUBDIVISION REGISTRATION
- ALTERNATIVE METHODS—PERMANENT STORM WATER MANAGEMENT

OWNER/OPERATOR(S) THAT USE AN ALTERNATIVE METHOD FOR THE PERMANENT STORM WATER MANAGEMENT SYSTEM AS DESCRIBED IN THE PERMIT ARE PROHIBITED FROM TERMINATING THIS PERMIT UNTIL FINAL STABILIZATION HAS BEEN ACHIEVED ON SITE AND EITHER:

- THE TWO YEARS OF MONITORING DATA REQUIRED IN THE PERMIT HAS BEEN SUBMITTED TO THE MPCA AND THE MPCA HAS DETERMINED THAT THE REQUIRED TREATMENT HAS BEEN ACHIEVED. THE OWNER/OPERATOR WILL BE NOTIFIED IN WRITING WITHIN 30 DAYS AFTER THE MONITORING DATA HAS BEEN SUBMITTED. IF THE OWNER/OPERATOR HAS NOT HEARD FROM THE MPCA WITHIN 30 DAYS AFTER SUBMITTING THE REQUIRED DATA, THE OWNER/OPERATOR CAN SUBMIT A NOT.
- THE OWNER/OPERATOR CAN SUBMIT A NOT, EVEN IF THE TREATMENT IS LESS THAN TWO YEARS, IF THE MPCA DETERMINES THAT THE ALTERNATIVE METHOD IS ACHIEVING THE REQUIRED TREATMENT.

DURING THE MONITORING AND EVALUATION OF THE ALTERNATIVE METHOD, THE OWNER/OPERATOR IS NOT RESPONSIBLE FOR OTHER PERMIT REQUIREMENTS THAT HAVE BEEN TRANSFERRED AS DESCRIBED IN CHANGE OF COVERAGE.

**INSPECTIONS AND MAINTENANCE**

INSPECTIONS OF THE CONSTRUCTION SITE SHALL BE CONDUCTED ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS, AND WITHIN SEVEN (7) DAYS AFTER THAT.

- INSPECTIONS SHALL INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS.
- STABILIZED AREAS WITH PERMANENT COVER SHALL BE INSPECTED ONCE PER MONTH, WHERE CONSTRUCTION SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AREAS AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE. THE SITE SHALL BE INSPECTED FOR A PERIOD OF TWELVE (12) MONTHS (THE INSPECTIONS MAY BE CEASED DURING FROZEN GROUND CONDITIONS). FOLLOWING THE TWELFTH MONTH OF PERMANENT COVER AND NO CONSTRUCTION ACTIVITY, INSPECTIONS MAY BE TERMINATED UNTIL CONSTRUCTION ACTIVITY IS ONCE AGAIN INITIATED OR SOONER IF NOTIFIED IN WRITING BY THE MPCA, WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS. THE REQUIRED INSPECTIONS AND MAINTENANCE SCHEDULE MUST BEGIN WITHIN 24 HOURS AFTER RAINFALL OCCURS AT THE SITE OR PRIOR TO RESUMING CONSTRUCTION, WHICHEVER COMES FIRST.
- ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs MUST BE INSPECTED TO ENSURE INTEGRITY AND EFFECTIVENESS. ALL NONFUNCTIONAL BMPs MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPs WITHIN 24 HOURS AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED WITHIN THE EROSION PREVENTION AND SEDIMENT CONTROL BMPs SECTION.
- ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA AND THESE AREAS ARE PROTECTED FROM COMPACTION DUE TO CONSTRUCTION EQUIPMENT DRIVING ACROSS THE INFILTRATION AREA.
- ALL SILT FENCES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/3 OF THE HEIGHT OF THE FENCE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- CONSTRUCTION SITE VEHICLE EXIT LOCATIONS MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES, WITHIN 24 HOURS OF DISCOVERY, OR IF APPLICABLE, WITHIN A SHORTER TIME.
- IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED IN A MANNER AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT IN STREETS COULD BE WASHED INTO STORM SEWERS BY THE NEXT RAIN AND/OR POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS).
- BMP MAINTENANCE:
  - FOLLOW THE DESIGNER'S OR MANUFACTURER'S RECOMMENDED MAINTENANCE PROCEDURES FOR ALL BMPs.
  - REMOVE SEDIMENT FROM BMPs AS APPROPRIATE AND PROPERLY DISPOSE OF SEDIMENT INTO CONTROLLED AREAS TO PREVENT SOIL FROM RETURNING TO THE BMP DURING SUBSEQUENT RAIN EVENTS.
  - REMOVE SEDIMENT FROM PAVED ROADWAYS AND FROM AROUND BMPs PROTECTING STORM DRAIN INLETS.
  - ENSURE THAT CONSTRUCTION SUPPORT ACTIVITIES, INCLUDING BORROW AREAS, WASTE AREAS, CONTRACTOR WORK AREAS, AND MATERIAL STORAGE AREAS AND DEDICATED CONCRETE AND ASPHALT BATCH PLANTS ARE CLEANED AND MAINTAINED.
  - REPLACE DAMAGED BMPs, SUCH AS SILT FENCES, THAT NO LONGER OPERATE EFFECTIVELY.

**RECORDKEEPING/RECORD RETENTION**

- THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS SHALL BE KEPT AT THE SITE DURING CONSTRUCTION BY THE OWNER/OPERATOR WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON-SITE VEHICLE DURING NORMAL WORKING HOURS.
- ALL OWNER(S) MUST KEEP THE SWPPP, ALONG WITH THE FOLLOWING ADDITIONAL RECORDS, ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION (NOT). THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF THE NOT.
  - COPY OF THE SWPPP, WITH ANY MODIFICATIONS
  - INSPECTION AND MAINTENANCE RECORDS
  - PERMANENT OPERATION AND MAINTENANCE AGREEMENTS
  - CALCULATIONS FOR THE DESIGN OF TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS
  - ANY OTHER PERMITS REQUIRED FOR THE PROJECT
  - RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION
  - ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
  - ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS.
- THE FOLLOWING IS A LIST OF RECORDS THAT SHALL BE KEPT AT THE PROJECT SITE AVAILABLE FOR INSPECTORS TO REVIEW:
  - COPY OF THE SWPPP, WITH ANY MODIFICATIONS
  - INSPECTION AND MAINTENANCE RECORDS
  - PERMANENT OPERATION AND MAINTENANCE AGREEMENTS
  - CALCULATIONS FOR THE DESIGN OF TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS
  - ANY OTHER PERMITS REQUIRED FOR THE PROJECT
  - RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION
  - ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
  - ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS.

**LOG OF CHANGES TO THE SWPPP/AMENDMENTS**

- THE OWNER/OPERATOR(S) MUST AMEND THE SWPPP AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, SUCH AS ADDITIONAL OR MODIFIED BMPs, DESIGNED TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER:
  - THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR UNDERGROUND WATERS;
  - INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE OR FEDERAL OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR UNDERGROUND WATERS OR THAT THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES; OR
  - THE SWPPP IS NOT ACHIEVING THE GENERAL OBJECTIVES OF MINIMIZING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, OR THE SWPPP IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.
  - AT ANY TIME AFTER PERMIT COVERAGE IS EFFECTIVE, THE MPCA MAY DETERMINE THAT THE PROJECT'S STORM WATER DISCHARGES MAY CAUSE, HAVE REASONABLE POTENTIAL TO CAUSE, OR CONTRIBUTE TO NON-ATTAINMENT OF ANY APPLICABLE WATER QUALITY STANDARD, OR THAT THE SWPPP DOES NOT INCORPORATE THE APPLICABLE REQUIREMENTS IN THE PERMIT FOR DISCHARGES TO IMPAIRED WATERS AND TIDALS. IF MPCA MAKES SUCH DETERMINATION(S) OR ANY OF THE DETERMINATIONS NOTED ABOVE, MPCA WILL NOTIFY THE OWNER/OPERATOR(S) IN WRITING IN RESPONSE. THE OWNER/OPERATOR(S) MUST DEVELOP A SUPPLEMENTAL BMP ACTION PLAN OR APPROPRIATE SWPPP AMENDMENTS DESCRIBING SWPPP MODIFICATIONS TO ADDRESS THE IDENTIFIED CONCERNS AND SUBMIT INFORMATION REQUESTED BY MPCA, WHICH MAY INCLUDE AN INDIVIDUAL PERMIT APPLICATION IF MPCA'S WRITTEN NOTIFICATION REQUIRES A RESPONSE. FAILURE TO RESPOND WITHIN THE SPECIFIED TIMEFRAME CONSTITUTES A PERMIT VIOLATION.

**EROSION PREVENTION AND SEDIMENT CONTROL**

- SEE EROSION PREVENTION AND SEDIMENT CONTROL SHEET FOR THE LOCATION AND TYPE OF TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL BMPs. SEE GRADING AND DRAINAGE, UTILITY, PLANTING, AND SEEDING LAYOUT SHEETS FOR THE LOCATION AND TYPE OF PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs.
- MINIMIZE DISTURBED AREAS AND PROTECT NATURAL FEATURES AND SOIL

APPROPRIATE CONSTRUCTION PRACTICES (E.G. CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING) SHALL BE USED TO MINIMIZE EROSION. AREAS NOT TO BE DISTURBED WILL BE DELINEATED (E.G. WITH FLAGS, STAKES, SIGNS, SILT FENCE ETC.) BEFORE WORK BEGINS.

**PHASE CONSTRUCTION ACTIVITY**

SEDIMENT CONTROL PRACTICES SHALL BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UPGRADED LAND DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH THE PERMIT.

THE TIMING OF THE INSTALLATION OF SEDIMENT CONTROL PRACTICES MAY BE ADJUSTED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES. ONLY SHORT-TERM ACTIVITY MUST BE COMPLETED AS QUICKLY AS POSSIBLE AND THE SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IMMEDIATELY AFTER THE ACTIVITY IS COMPLETED. HOWEVER, SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE ACTIVITY IS NOT COMPLETE.

**CONTROL STORM WATER FLOWING ONTO AND THROUGH THE PROJECT**

THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, SHALL BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER.

STABILIZATION OF THE LAST 200 LINEAL FEET SHALL BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER.

STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES SHALL BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED.

TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DICES ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS SHALL BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

**STABILIZE SOILS**

ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) AND THE CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES ARE EXEMPT FROM THE REQUIREMENT.

TEMPORARY SOIL STOCKPILES SHALL HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CURBS OR BARRIERS PLACED IN SURFACE WATERS, INCLUDING STORM WATER CONVEYANCES SUCH AS CURB AND CUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORM WATER.

WHEN THE SITE HAS A DISCHARGE POINT WITHIN ONE MILE OF, AND FLOWS TO, A SPECIAL OR IMPAIRED WATERS, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

**PROTECT SLOPES**

SLOPES WITH A GRADE OF 3:1 OR STEEPER WITH A SLOPE LENGTH OF GREATER THAN 75 FEET REQUIRE SLOPE BREAKS (E.G. CHECK DAMS) TO MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES.

**PROTECT STORM DRAIN INLETS**

ALL STORM DRAIN INLETS SHALL BE PROTECTED BY APPROPRIATE BMPs DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED IF A SPECIFIC SAFETY CONCERN HAS BEEN IDENTIFIED AND DOCUMENTATION HAS BEEN PROVIDED MEETING THE PERMIT REQUIREMENTS.

**ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS**

**RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES**

DEWATERING OR BASIN DRAINING OF TURBID OR SEDIMENT LADEN WATER RELATED TO CONSTRUCTION ACTIVITIES SHALL BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN OR TREATED WITH THE APPROPRIATE BMP PRIOR TO ENTERING THE SURFACE WATER.

DISCHARGE SHALL NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS, ADVERSELY AFFECT RECEIVING WATER OR IMPACT WETLANDS, OR DOWNSTREAM PROPERTIES. DISCHARGE POINTS SHALL BE ADEQUATELY PROTECTED FROM EROSION AND SCOUR BY ACCEPTED ENERGY DISSIPATION MEASURES.

A TEMPORARY (OR PERMANENT) SEDIMENT BASIN SHALL BE PROVIDED PRIOR TO THE RUNOFF LEAVING THE CONSTRUCTION SITE OR ENTERING SURFACE WATERS WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION.

WHEN THE SITE HAS A DISCHARGE POINT WITHIN ONE MILE OF, AND FLOWS TO, A SPECIAL OR IMPAIRED WATERS, TEMPORARY SEDIMENT BASIN REQUIREMENTS MUST BE USED FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

TEMPORARY BASINS SHALL PROVIDE STORAGE BELOW THE OUTLET PIPE FOR A CALCULATED VOLUME OF RUNOFF FROM A TWO (2) YEAR, 24-HOUR STORM FROM EACH ACRE DRAINED TO THE BASIN AND IN NO CASE SHALL THE BASIN PROVIDE LESS THAN 1800 CUBIC FEET OF STORAGE BELOW THE OUTLET PIPE FROM EACH ACRE DRAINED TO THE BASIN.

WHERE NO SUCH CALCULATION HAS BEEN PERFORMED, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN PROVIDING 3,600 CUBIC FEET OF STORAGE BELOW THE OUTLET PIPE PER ACRE DRAINED TO THE BASIN, SHALL BE PROVIDED WHERE ATTAINABLE UNTIL PERMANENT COVER IS ESTABLISHED FOR THE ENTIRE DRAINAGE AREA OF THE TEMPORARY BASIN.

THE BASINS SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO THE FOLLOWING REQUIREMENTS:

- TEMPORARY BASIN OUTLETS SHALL BE DESIGNED TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. THE BASIN SHALL BE DESIGNED WITH THE ABILITY TO ALLOW COMPLETE BASIN DRAWDOWN (E.G., PERFORATED RISER PIPE WRAPPED WITH FILTER FABRIC AND COVERED WITH CRUSHED GRAVEL, PUMPS OR OTHER MEANS). PROVIDE A STABILIZED EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY. ENERGY DISSIPATION SHALL BE PROVIDED FOR THE BASIN OUTLET WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.
- THE TEMPORARY (OR PERMANENT) BASINS SHALL BE CONSTRUCTED AND MADE OPERATIONAL CONCURRENT WITH THE START OF SOIL DISTURBANCE THAT IS UNDERWAY IN THE AREA AND CONSIDERS RUNOFF TO THE POND.
- WHERE THE TEMPORARY SEDIMENT BASIN IS NOT ATTAINABLE DUE TO SITE LIMITATIONS, EQUIVALENT SEDIMENT CONTROLS SUCH AS SPALLER SEDIMENT BASINS, AND/OR SEDIMENT TRAPS, SILT FENCES, VEGETATIVE BUFFER STRIPS, OR ANY APPROPRIATE COMBINATION OF MEASURES ARE REQUIRED FOR ALL DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA AND FOR THOSE SIDE SLOPE BOUNDARIES DEEMED APPROPRIATE AS DICTATED BY INDIVIDUAL SITE CONDITIONS. IN DETERMINING WHETHER INSTALLING A SEDIMENT BASIN IS ATTAINABLE, THE OWNER/OPERATOR MUST CONSIDER PUBLIC SAFETY AND MUST CONSIDER FACTORS SUCH AS SITE SOILS, SLOPE, AND AVAILABLE AREA ON SITE. THIS DETERMINATION MUST BE DOCUMENTED IN THE SWPPP.

**ESTABLISH STABILIZED CONSTRUCTION EXITS**

VEHICLE TRACKING OF SEDIMENT FROM THE CONSTRUCTION SITE (OR ONTO STREETS WITHIN THE SITE) SHALL BE MINIMIZED BY BMPs SUCH AS STONE PADS, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS. STREET SWEEPING SHALL BE USED IF SUCH BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET.

**SITE EVALUATION/ASSESSMENT/PLANNING**

- CONTACT INFORMATION/RESPONSIBLE PARTIES
  - THE OPERATOR SHALL HAVE PRIMARY RESPONSIBILITY AND SIGNIFICANT AUTHORITY FOR THE DEVELOPMENT, IMPLEMENTATION, MAINTENANCE, INSPECTION AND AMENDMENTS TO THE APPROVED SWPPP. DUTIES INCLUDE BUT ARE NOT LIMITED TO:
    - ENSURING FULL COMPLIANCE WITH THE SWPPP AND THE PERMIT
    - IMPLEMENTING ALL ELEMENTS OF THE SWPPP, INCLUDING BUT NOT LIMITED TO:
      - IMPLEMENTING PROMPT AND EFFECTIVE EROSION AND SEDIMENT CONTROL MEASURES
      - IMPLEMENTING ALL NON-STORM WATER MANAGEMENT, AND GOOD HOUSEKEEPING BMPs ENSURING THAT NO MATERIALS OTHER THAN STORM WATER ARE DISCHARGED IN QUANTITIES WHICH WILL HAVE AN ADVERSE EFFECT ON RECEIVING WATERS OR STORM DRAIN SYSTEMS, ETC.
      - CONDUCTING ROUTINE INSPECTIONS AND MAINTENANCE
      - ENSURING ELIMINATION OF ALL UNAUTHORIZED DISCHARGES
      - COORDINATING TO ASSURE ALL OF THE NECESSARY CORRECTIONS/REPAIRS ARE MADE IMMEDIATELY, AND THAT THE PROJECT COMPLIES WITH THE SWPPP, THE PERMIT, AND APPROVED PLANS AT ALL TIMES.

**POLLUTION PREVENTION MANAGEMENT MEASURES**

- OWNER/OPERATOR MUST DEVELOP POLLUTION PREVENTION MANAGEMENT MEASURES, IMPLEMENT GOOD HOUSEKEEPING BMPs, MUST FOLLOW ALL APPLICABLE FEDERAL, STATE, AND LOCAL BUILDING CODES, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND THE GENERAL CONDITIONS AND GENERAL REQUIREMENTS OF THE CONSTRUCTION CONTRACT.
- OPERATOR TO TRACK PROGRESS OF THE FOLLOWING ITEMS ON SITE MAPS:
  - FORBIDDEN AREAS
  - MATERIAL STORAGE AREAS
  - VEHICLE AND EQUIPMENT FUELING AND MAINTENANCE AREAS
  - CONCRETE WASHOUTS
  - PAINT AND STUCCO WASHOUTS
  - DUMPSTERS OR OTHER TRASH AND DEBRIS CONTAINERS
  - SPILL KITS
  - STOCKPILES
  - ANY OTHER NON-STRUCTURAL NON-STORM WATER MANAGEMENT BMPs
  - ANY TEMPORARILY REMOVED STRUCTURAL BMPs
  - ANY CHANGES TO THE STRUCTURAL BMPs
- SOLID WASTE: COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.
- HAZARDOUS WASTE: OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.
- CONCRETE WASHOUT: ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.
- EXTERNAL VEHICLE WASHING: EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE.

**POST CONSTRUCTION BMPs**

- SEE GRADING AND DRAINAGE, UTILITY, AND LANDSCAPE SHEETS FOR POST CONSTRUCTION BMPs.

**SHEET INDEX**

SHEET	TITLE
C0.1	CIVIL TITLE SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEVELOPMENT PLAN
C2.1	SITE PLAN
C3.1	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C3.2	SWPPP NOTES
C4.1	UTILITIES
C7.1	CIVIL CONSTRUCTION DETAILS
C7.2	CIVIL CONSTRUCTION DETAILS
C7.3	CIVIL CONSTRUCTION DETAILS
L2.1	LANDSCAPE PLAN

**REVISION HISTORY**

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAN SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC

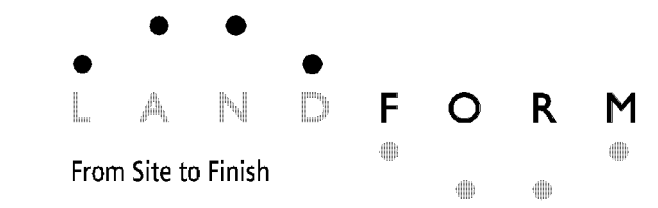
**PROJECT MANAGER REVIEW**

**CERTIFICATION**

NOT FOR CONSTRUCTION

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED IMPROPERLY. READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

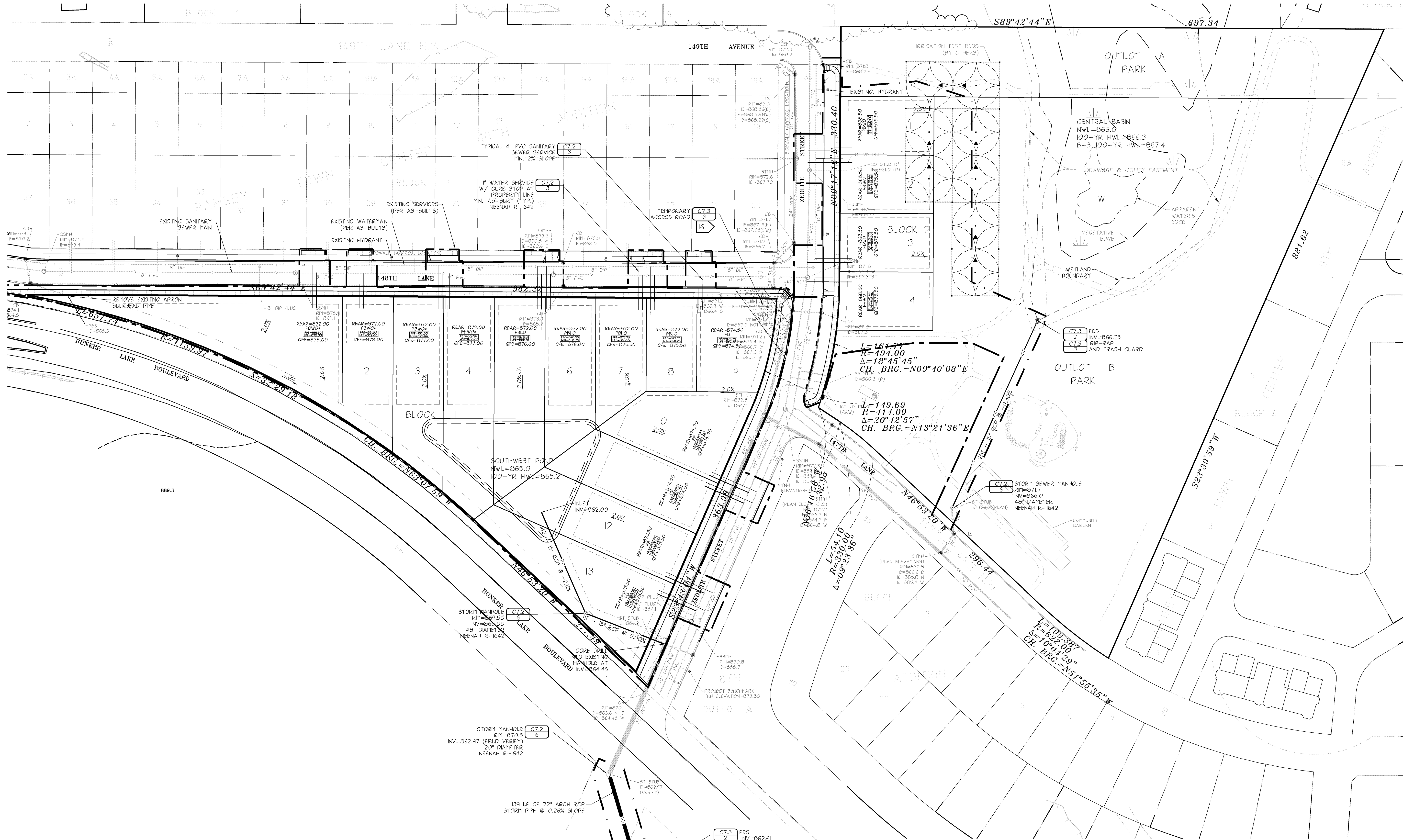
**CITY PERMIT SUBMITTAL**  
 3 JULY 2012



105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

FILE NAME C401RAM021.DWG  
 PROJECT NO. RAM12021/RAM12024

**UTILITIES**  
**C4.1**

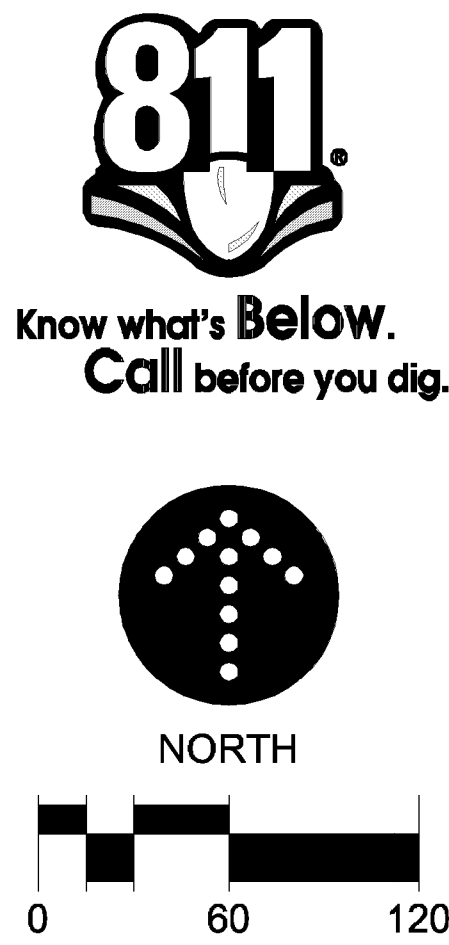


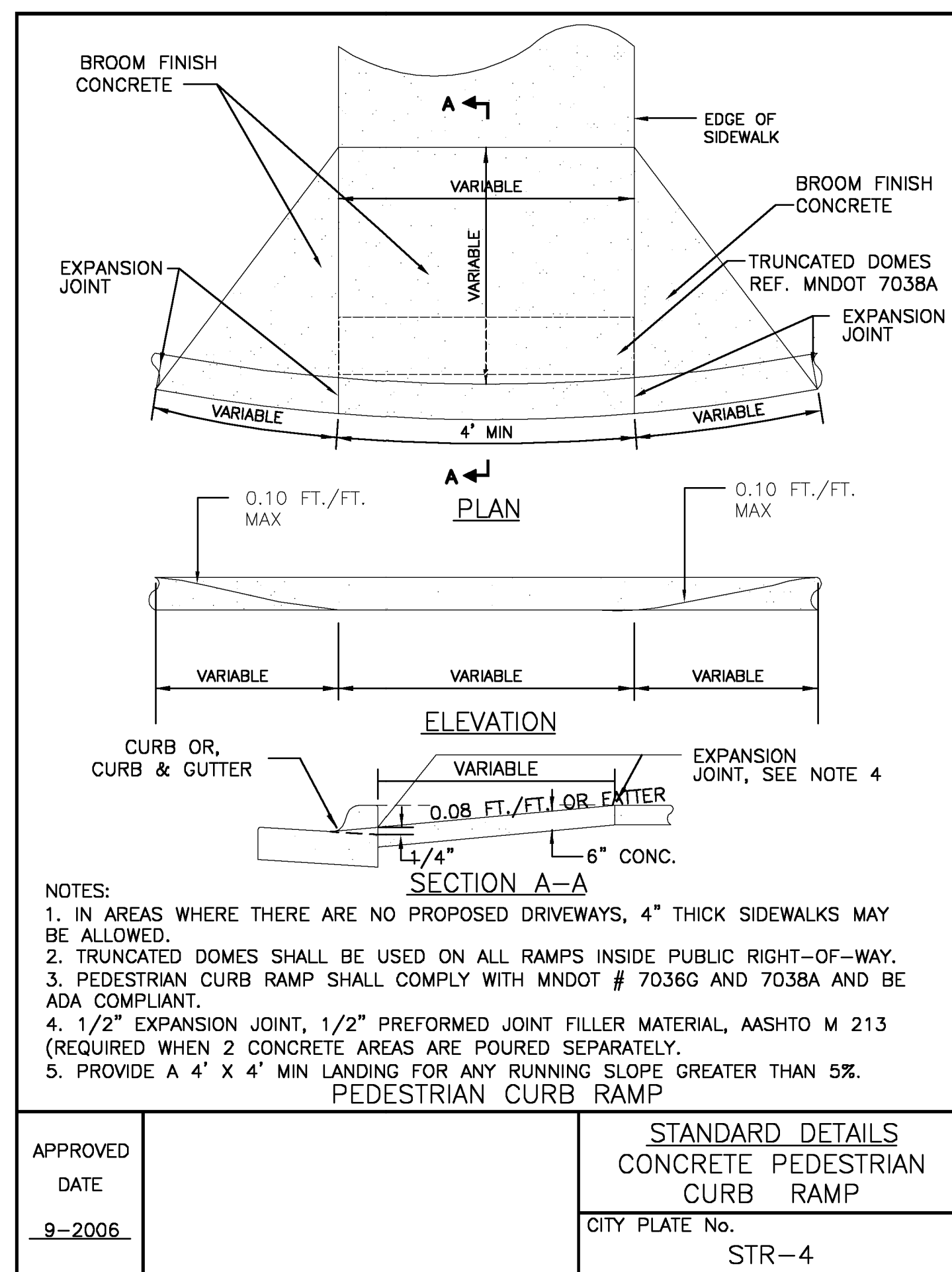
- UTILITY NOTES**
- PIPE MATERIALS: WATER SERVICE TYPE K COPPER; SANITARY SERVICE PVC SDR 26; STORM SEWER RCP CLASS 5.
  - CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING.
  - COORDINATE WITH PRIVATE UTILITIES TO PROVIDE ELECTRIC, NATURAL GAS, AND COMMUNICATIONS SERVICES.
  - PROVIDE MEANS AND MEASURES TO PROTECT ADJACENT PROPERTY FROM DAMAGE DURING UTILITY INSTALLATION.
  - PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR END OF END SECTION.
  - ADJUST STRUCTURES TO FINAL GRADE WHERE DISTURBED, COMPLY WITH REQUIREMENTS OF UTILITY. TEST REQUIREMENTS FOR TRAFFIC LOADING IN PAVED AREAS.
  - INSTALL TRACER WIRE WITH UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENTS.
  - CONNECT TO CITY UTILITIES IN ACCORDANCE WITH CITY OF RAMSEY STANDARDS.
  - CONTACT CITY OF RAMSEY FOR WET TAP INSPECTION.
  - MAINTAIN 7.5 FEET OF COVER ON WATER.
  - DEFLECT WATER TO MAINTAIN 18-INCH MINIMUM OUTSIDE SEPARATION AT SEWER CROSSINGS. CENTER PIPE LENGTHS TO PROVIDE GREATEST SEPARATION BETWEEN JOINTS.
  - CONTACT CITY OF RAMSEY BUILDING DEPARTMENT FOR FLUSHING AND PRESSURE TEST INSPECTIONS.
  - IF DEWATERING IS REQUIRED TO COMPLETE ANY WORK, THE CITY NEEDS TO REVIEW EACH PERMIT PRIOR TO IMPLEMENTATION.
  - SANITARY AND WATER SERVICES NEED TO EXTEND INTO THE LOT A MIN. OF 15' BEYOND THE PROPOSED SIDEWALK LOCATION.
  - A 4"x8" WYE (148TH LANE) OR A 4" x 4" WYE (ZEOLITE STREET) SHALL BE CUT INTO THE EXISTING SANITARY SEWER LINE FOR EACH SERVICE. SADDLE WYES ARE NOT ACCEPTABLE. CONTRACTOR SHALL PROVIDE BLANKHEADS AND BYPASS PUMPING SHLE WORKING ON THE SANITARY LINE.
  - CONTRACTOR TO MAINTAIN TEMPORARY ACCESS ROAD OVER LOT 9, BLOCK 1 WHILE SERVICES TO LOTS 3 & 4, BLOCK 2 ARE BEING INSTALLED. TEMPORARY ACCESS ROAD TO BE REMOVED UPON COMPLETION OF UTILITY WORK.
  - PROVIDE BARRICADES, LIGHTS, SIGNS, TRAFFIC CONTROL AND OTHER MEASURES NECESSARY FOR PROTECTION AND SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION.

- CONTRACTOR TO MAINTAIN TEMPORARY ACCESS ROAD OVER LOT 9, BLOCK 1 WHILE SERVICES TO LOTS 3 & 4, BLOCK 2 ARE BEING INSTALLED. TEMPORARY ACCESS ROAD TO BE REMOVED UPON COMPLETION OF UTILITY WORK.
- PROVIDE BARRICADES, LIGHTS, SIGNS, TRAFFIC CONTROL AND OTHER MEASURES NECESSARY FOR PROTECTION AND SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION.

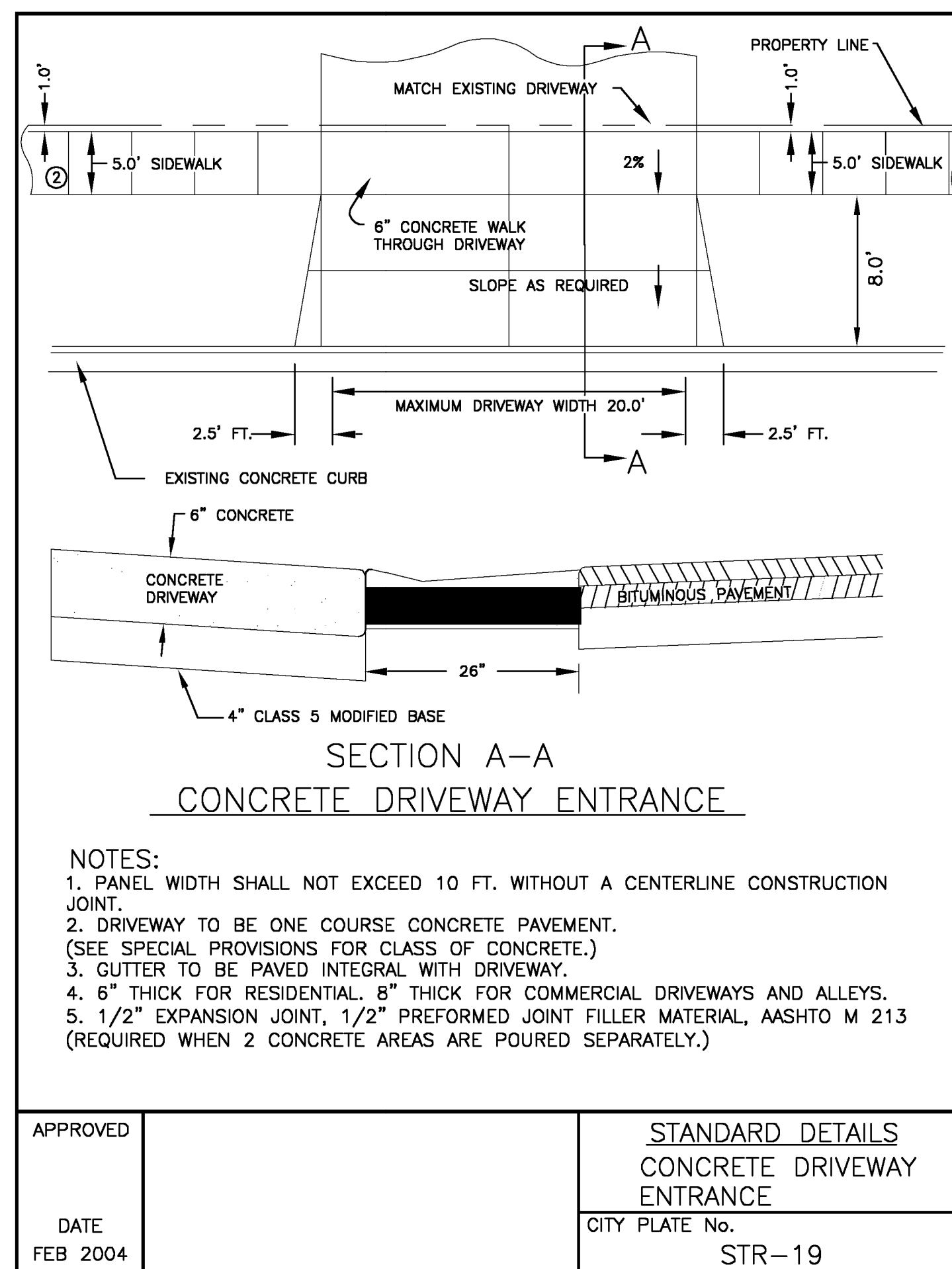
**UTILITY SERVICES INFORMATION**

BLOCK	LOT	MAIN LINE INV.	SAN. WYE INV.	SAN. SERVICE LENGTH	SAN. SERVICE INV.	WATER SERVICE LENGTH
1	1	861.98	862.65	45'	863.55	55'
1	2	861.70	862.37	45'	862.27	55'
1	3	861.25	861.92	45'	862.82	55'
1	4	861.20	861.87	45'	862.77	55'
1	5	860.67	861.34	45'	862.24	55'
1	6	860.62	861.29	45'	862.19	55'
1	7	860.11	860.78	44'	861.66	55'
1	8	860.06	860.73	44'	861.61	55'
1	9	859.85	860.52	43'	861.38	55'
1	10	858.72	859.47	55'	861.07	65'
1	11	858.75	860.00	55'	861.10	65'
1	12	858.92	860.17	55'	861.27	65'
1	13	858.94	860.19	55'	861.29	65'
2	1	xxx	xx	56'	xx	46'
2	2	xxx	xx	56'	xx	46'
2	3	xx	xx	56'	xx	46'
2	4	xx	xx	57'	xx	46'

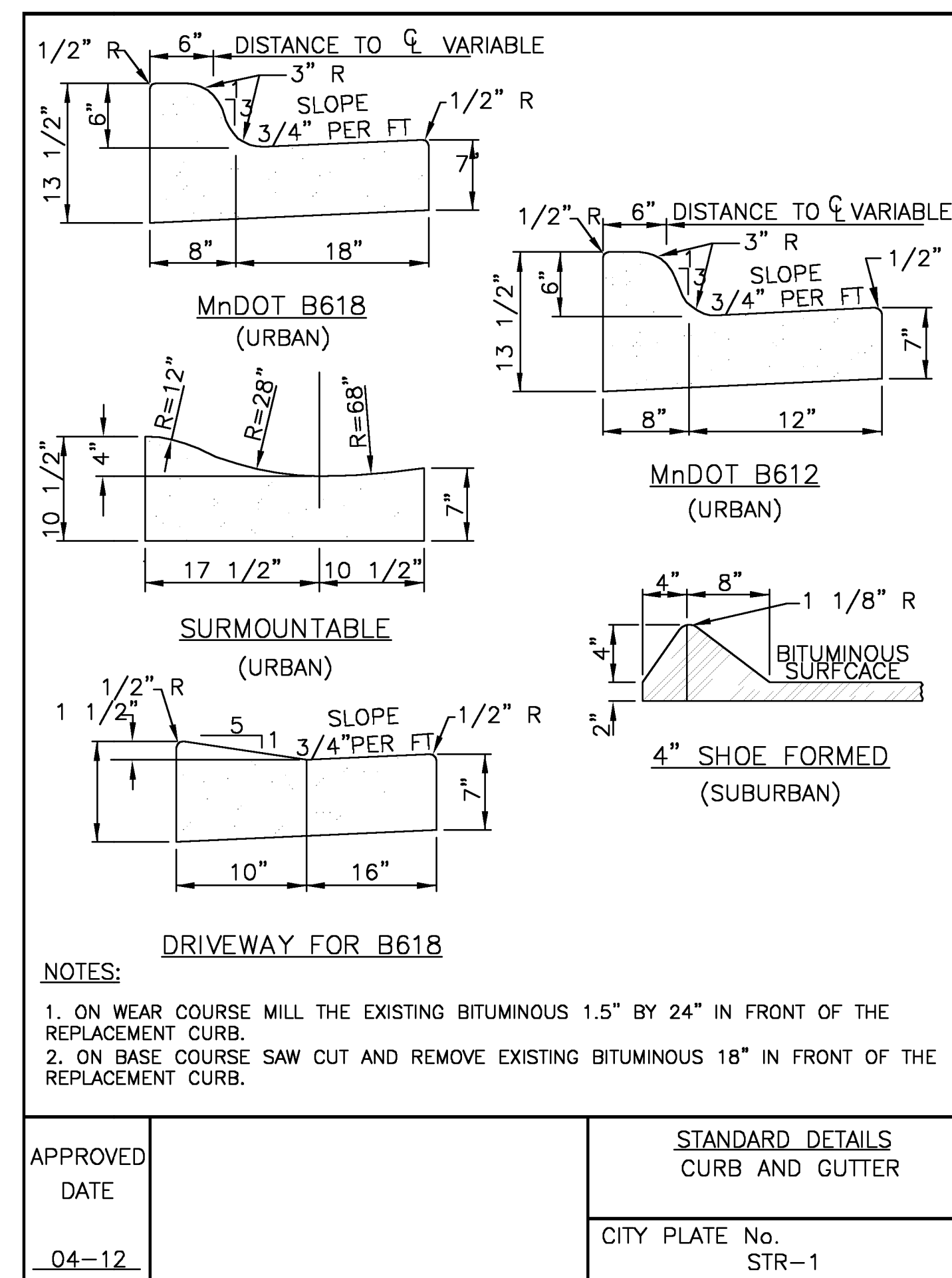




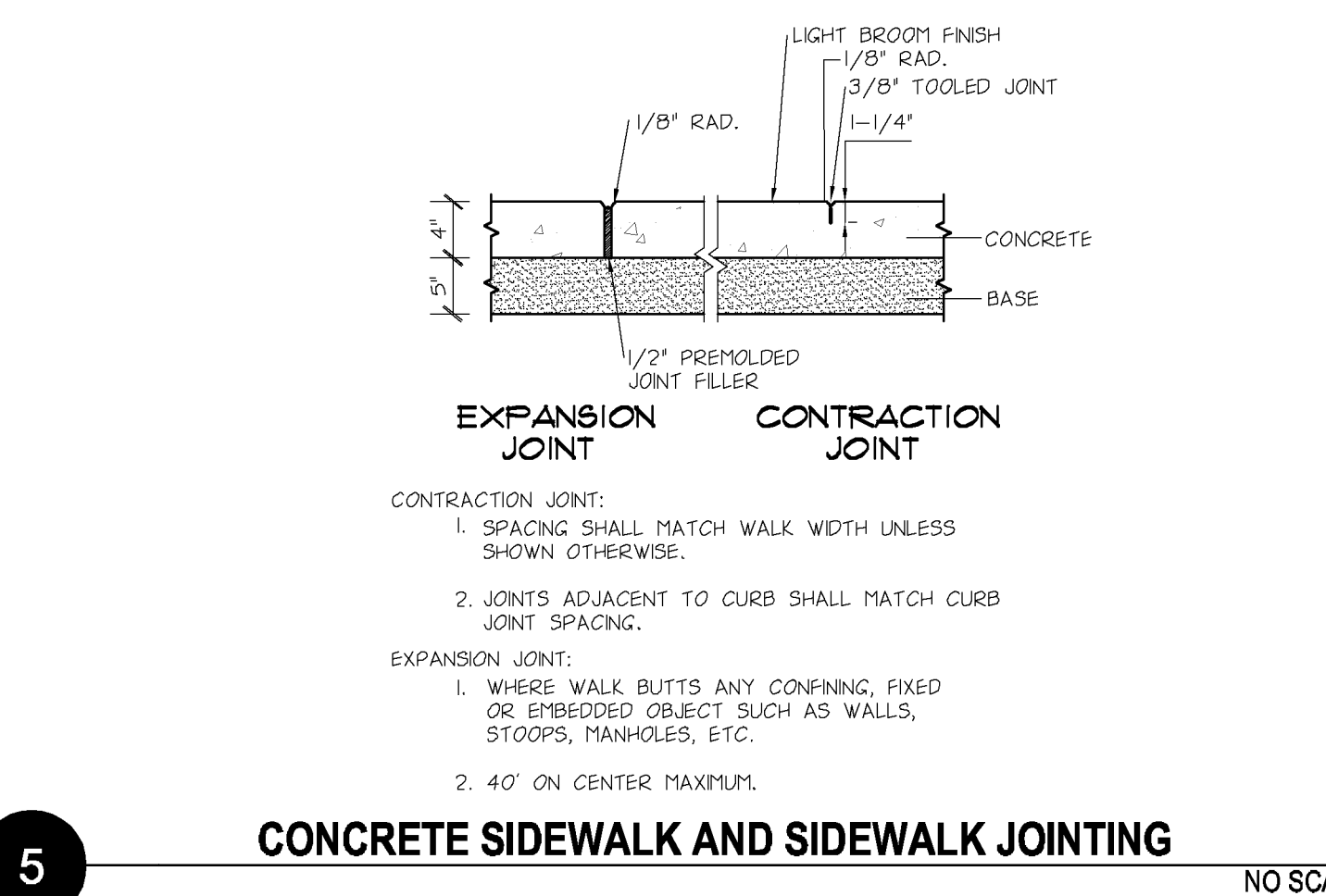
**7 CONCRETE PEDESTRIAN CURB RAMP** NO SCALE



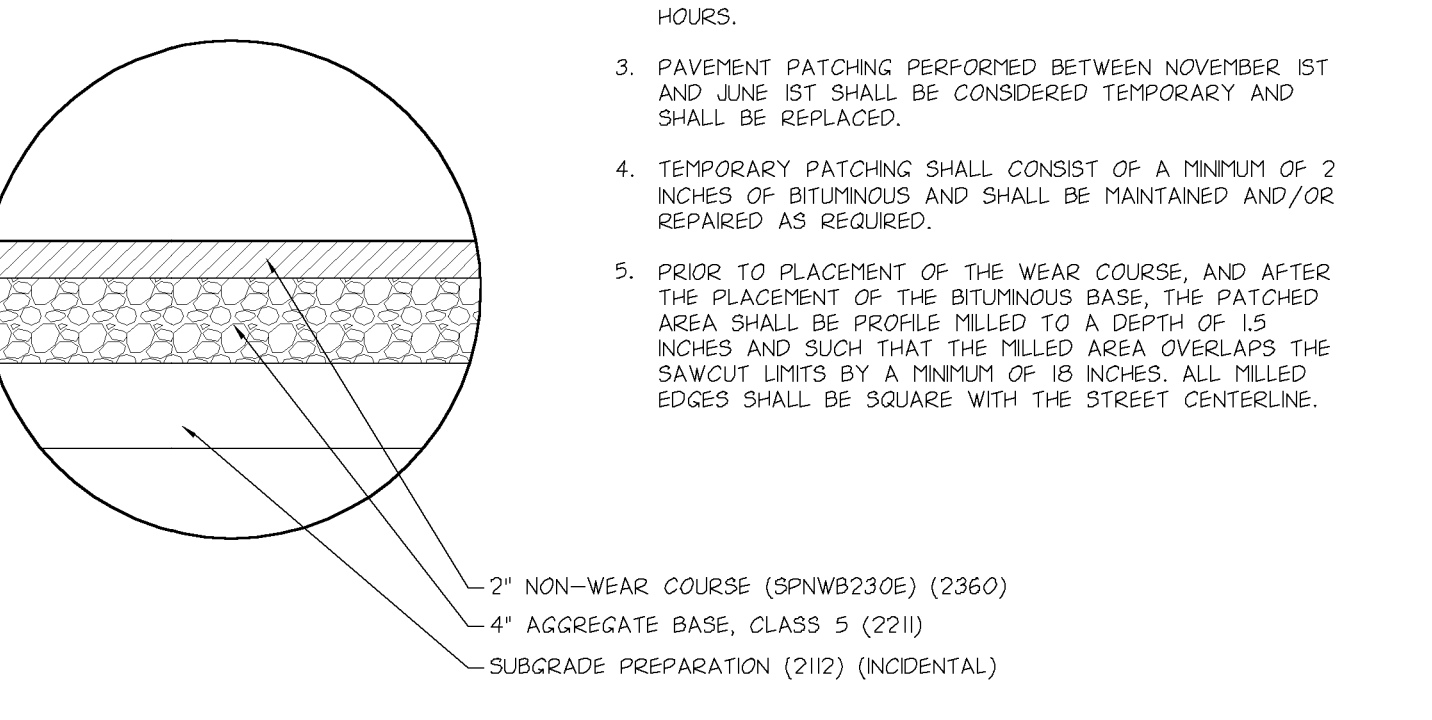
**8 CONCRETE DRIVEWAY ENTRANCE** NO SCALE



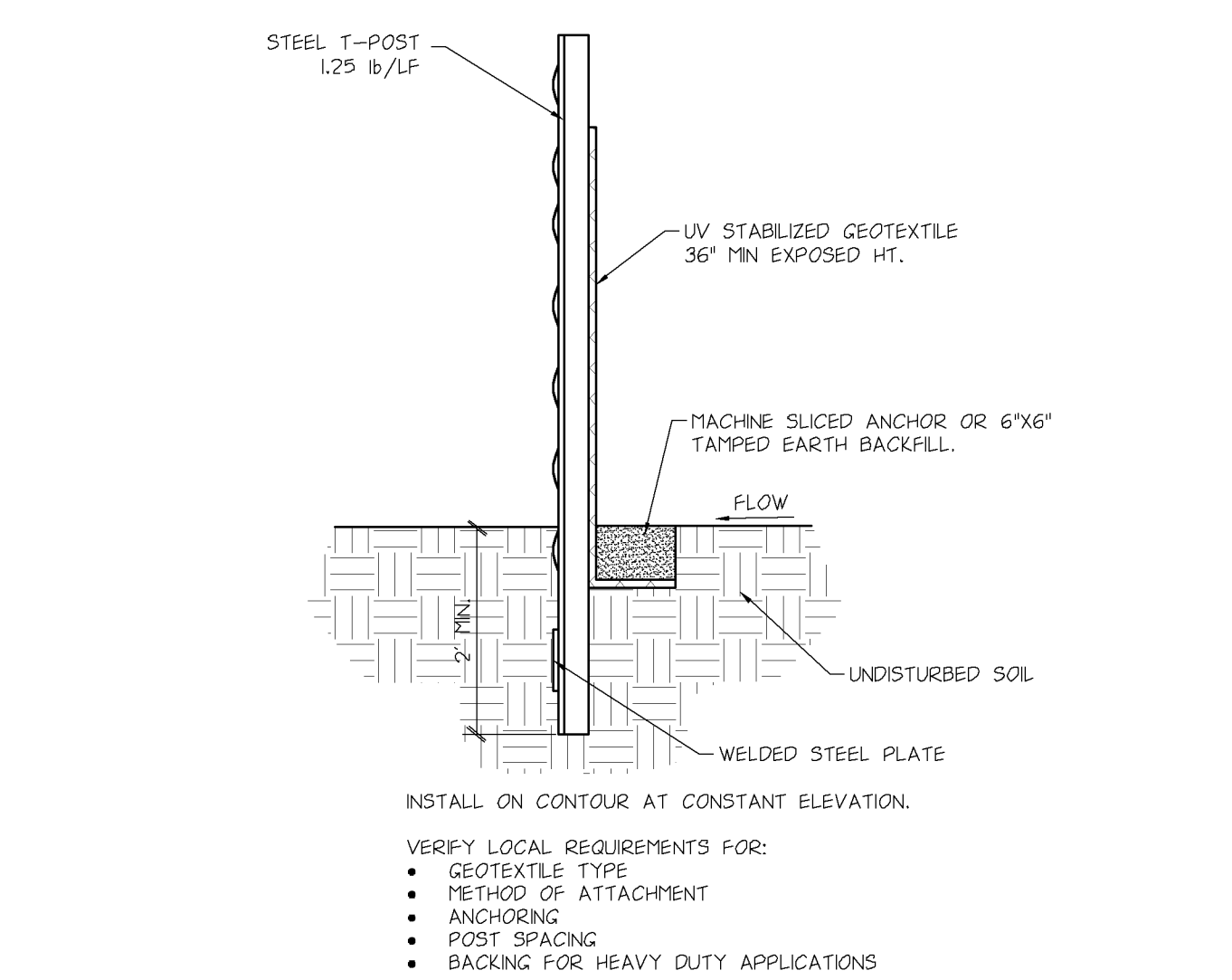
**4 CURB AND GUTTER** NO SCALE



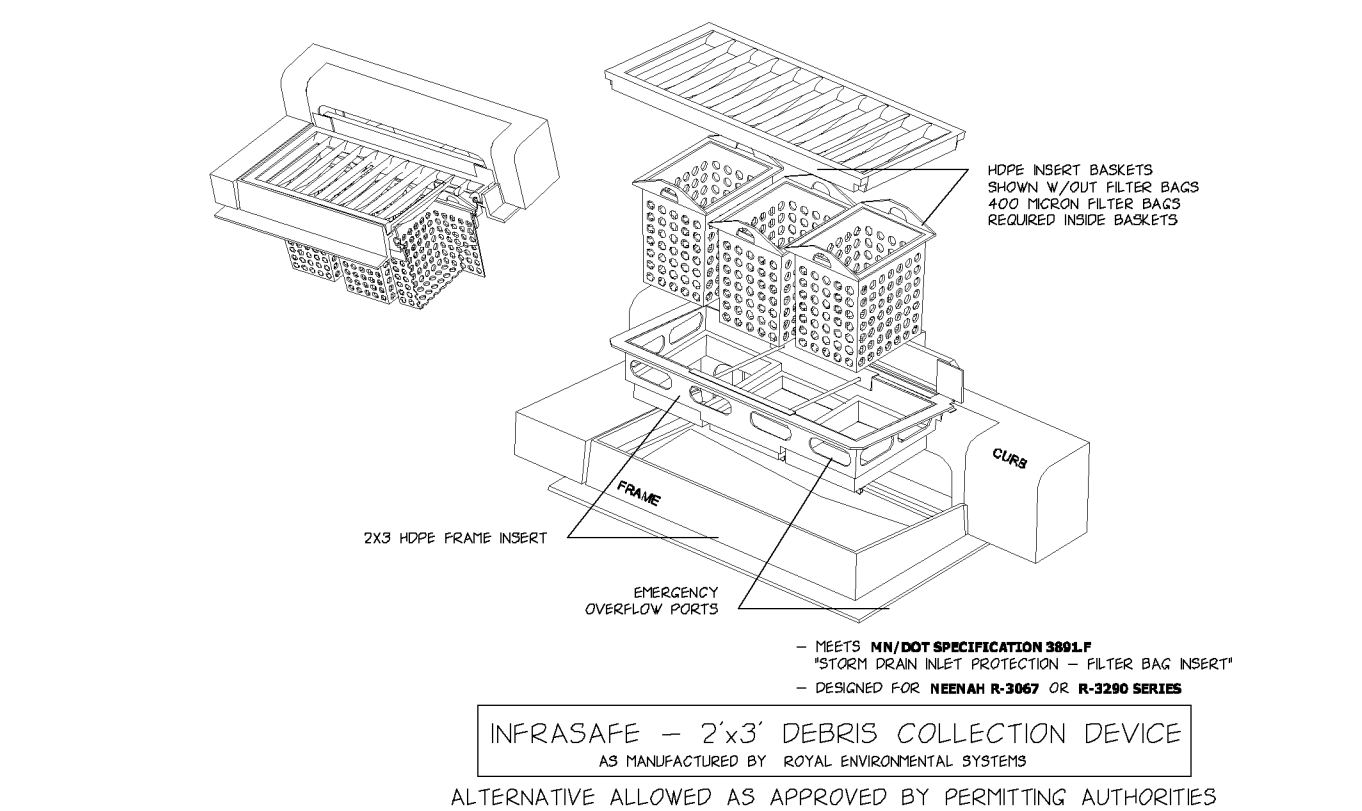
**5 CONCRETE SIDEWALK AND SIDEWALK JOINTING** NO SCALE



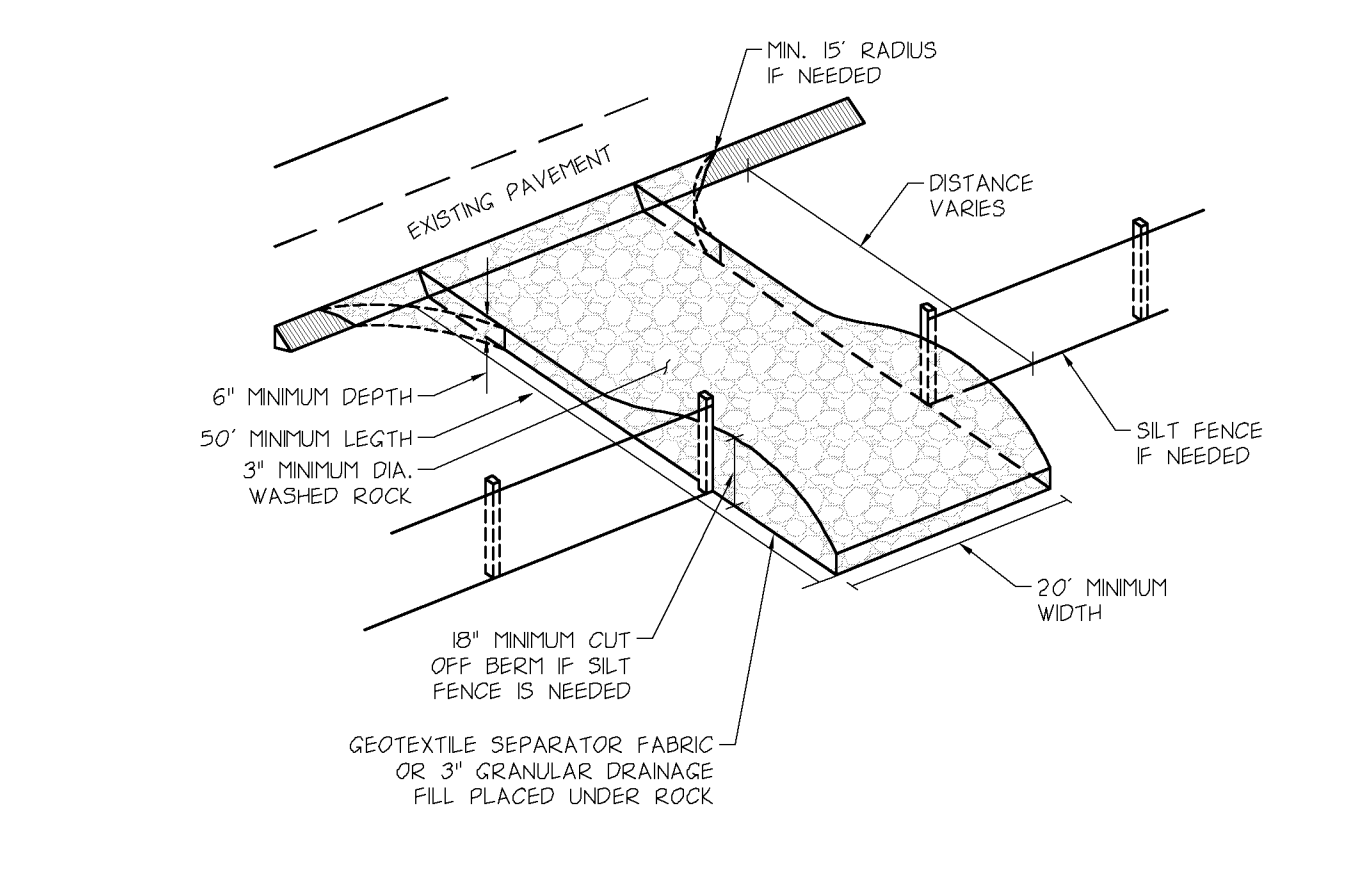
**6 BITUMINOUS PATCH** NO SCALE



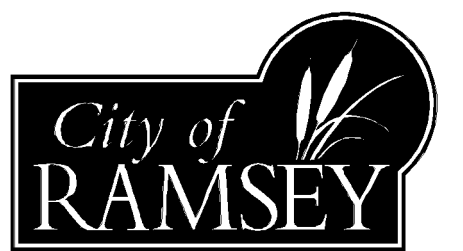
**1 SILT FENCE** NO SCALE



**2 INLET PROTECTION** NO SCALE



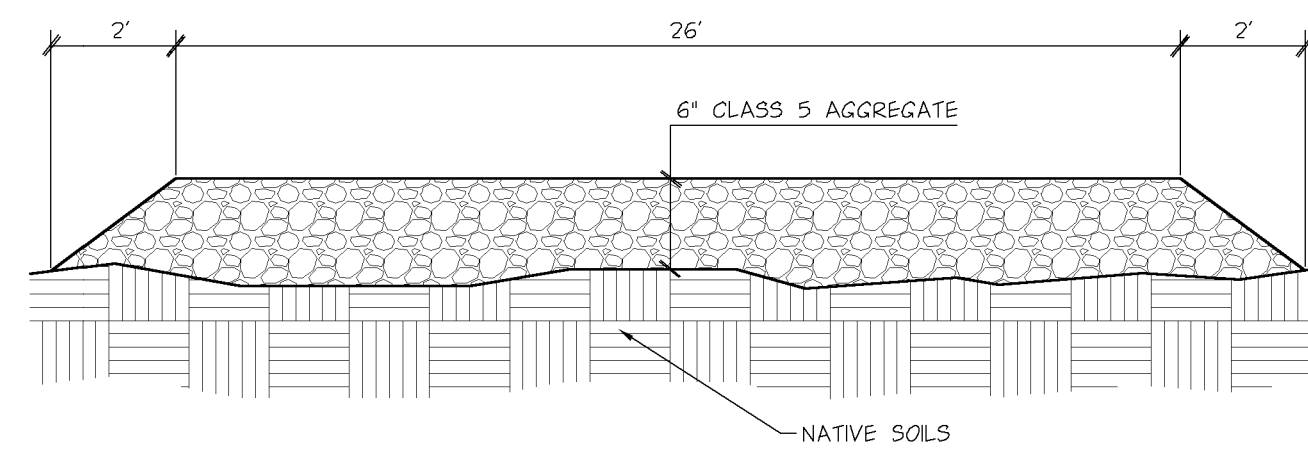
**3 VEHICLE TRACKING PAD** NO SCALE



SHEET	TITLE
C01	CIVIL TITLE SHEET
C11	EXISTING CONDITIONS
C12	DEVELOPMENT PLAN
C21	SITE PLAN
C31	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C32	SWPPP NOTES
C41	UTILITIES
C71	CIVIL CONSTRUCTION DETAILS
C72	CIVIL CONSTRUCTION DETAILS
C73	CIVIL CONSTRUCTION DETAILS
L01	LANDSCAPE PLAN

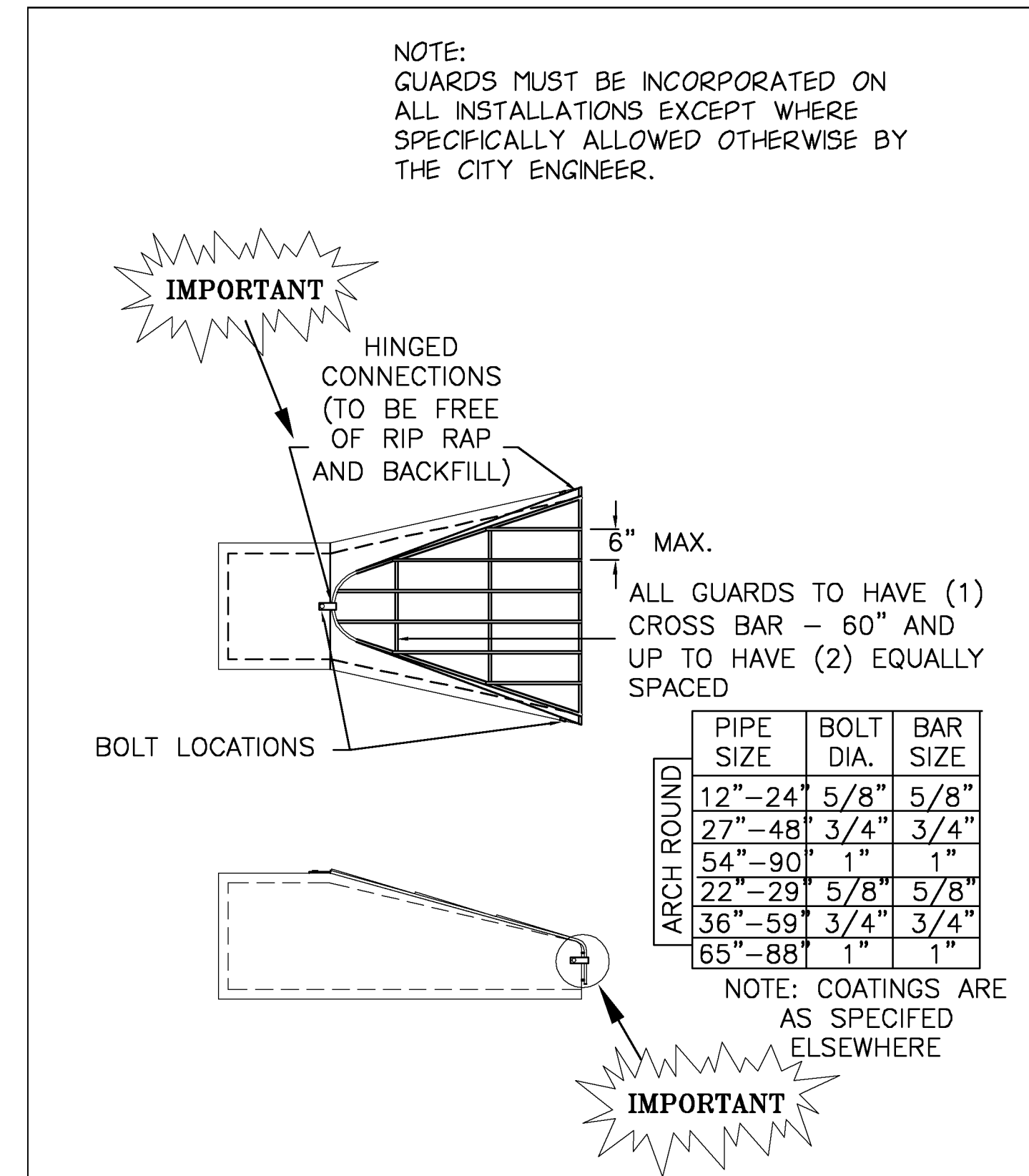
DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAT SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC





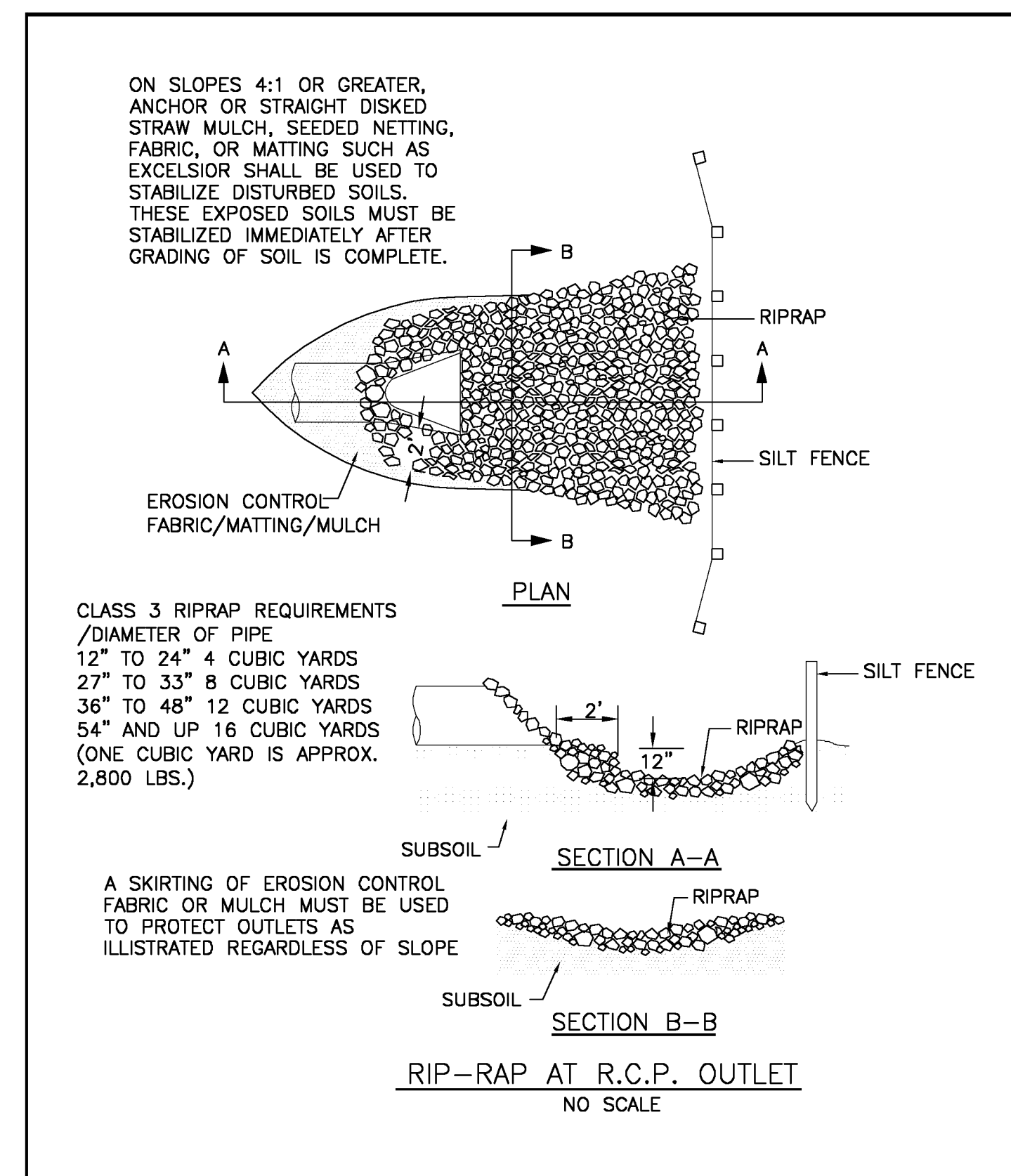
NOTES:  
 MAINTAIN TEMPORARY ROAD WHILE UTILITIES ARE BEING INSTALLED.  
 REMOVE TEMPORARY ROAD UPON COMPLETION OF UTILITY INSTALLATION.

**3** TEMPORARY ACCESS ROAD NO SCALE



APPROVED		STANDARD DETAILS TRASH GUARD
DATE 2-2006		CITY PLATE No. STO-12

**1** TRASH GUARD NO SCALE



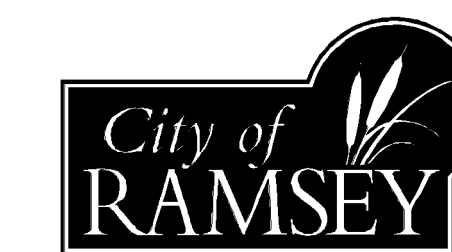
APPROVED		STANDARD DETAILS RIP - RAP
DATE 9-2011		CITY PLATE No. ERO-1

**2** RIP-RAP NO SCALE

DEVELOPER

**RAMSEY HRA**  
 7550 SUNWOOD DRIVE  
 RAMSEY, MN 55303  
 TEL: (763) 427-1410 · FAX: (763) 427-5543

MUNICIPALITY



PROJECT

**NORTH COMMONS  
 (COR THREE)  
 RAMSEY, MINNESOTA**

SHEET INDEX

SHEET	TITLE
C0.1	CIVIL TITLE SHEET
C1.1	EXISTING CONDITIONS
C1.2	DEVELOPMENT PLAN
C2.1	SITE PLAN
C3.1	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C3.2	SWPPP NOTES
C4.1	UTILITIES
C7.1	CIVIL CONSTRUCTION DETAILS
C7.2	CIVIL CONSTRUCTION DETAILS
C7.3	CIVIL CONSTRUCTION DETAILS
L0.1	LANDSCAPE PLAN

REVISION HISTORY

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAT SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC

PROJECT MANAGER REVIEW

BY: JAK DATE: 07.03.2012

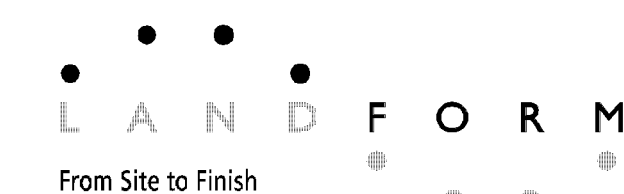
CERTIFICATION

NOT FOR CONSTRUCTION

IF THE SIGNATURE, SEAL OR FOUR LINES CHECKMARK ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED WITHOUT PERMISSION. READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

CITY PERMIT SUBMITTAL

3 JULY 2012



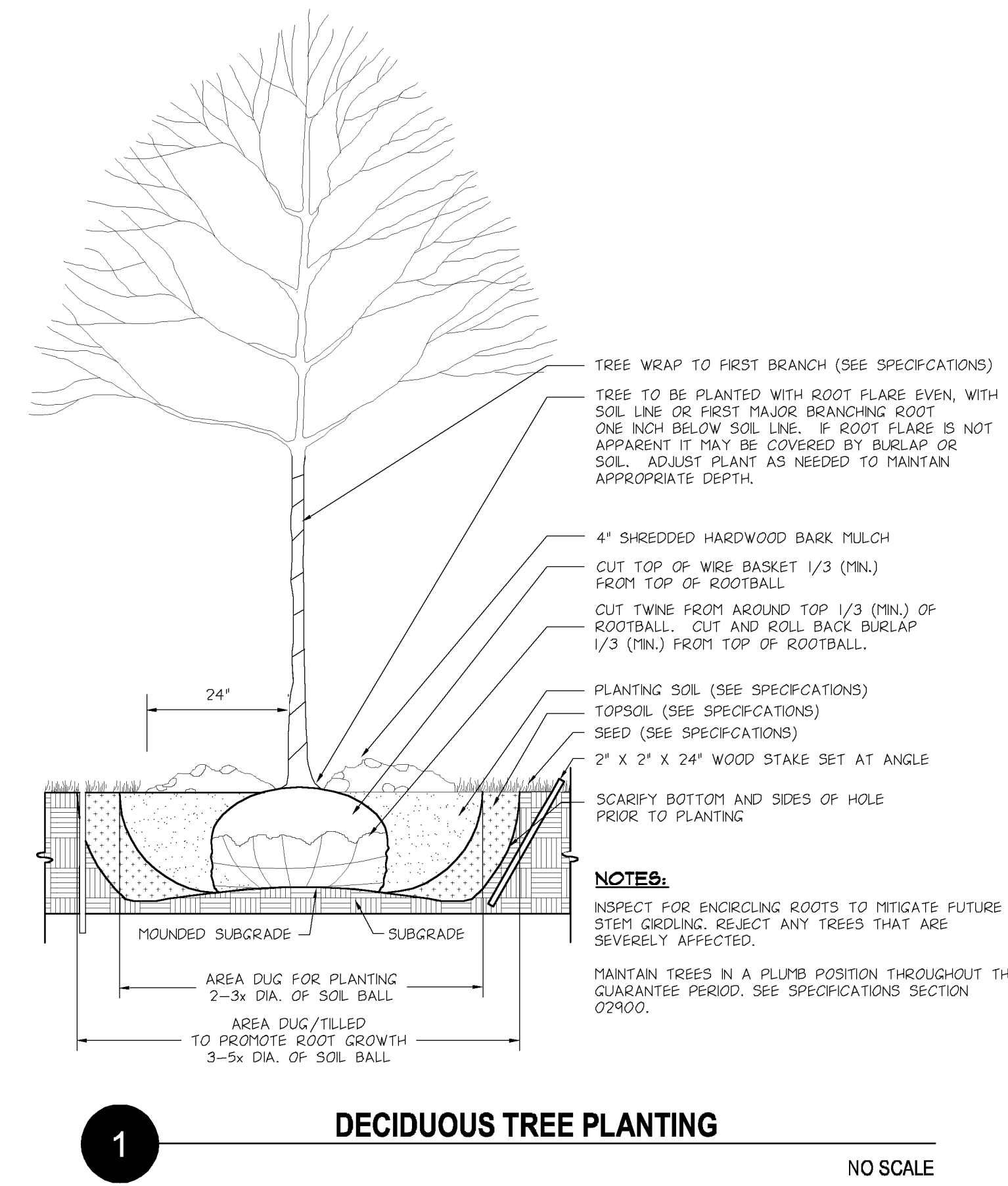
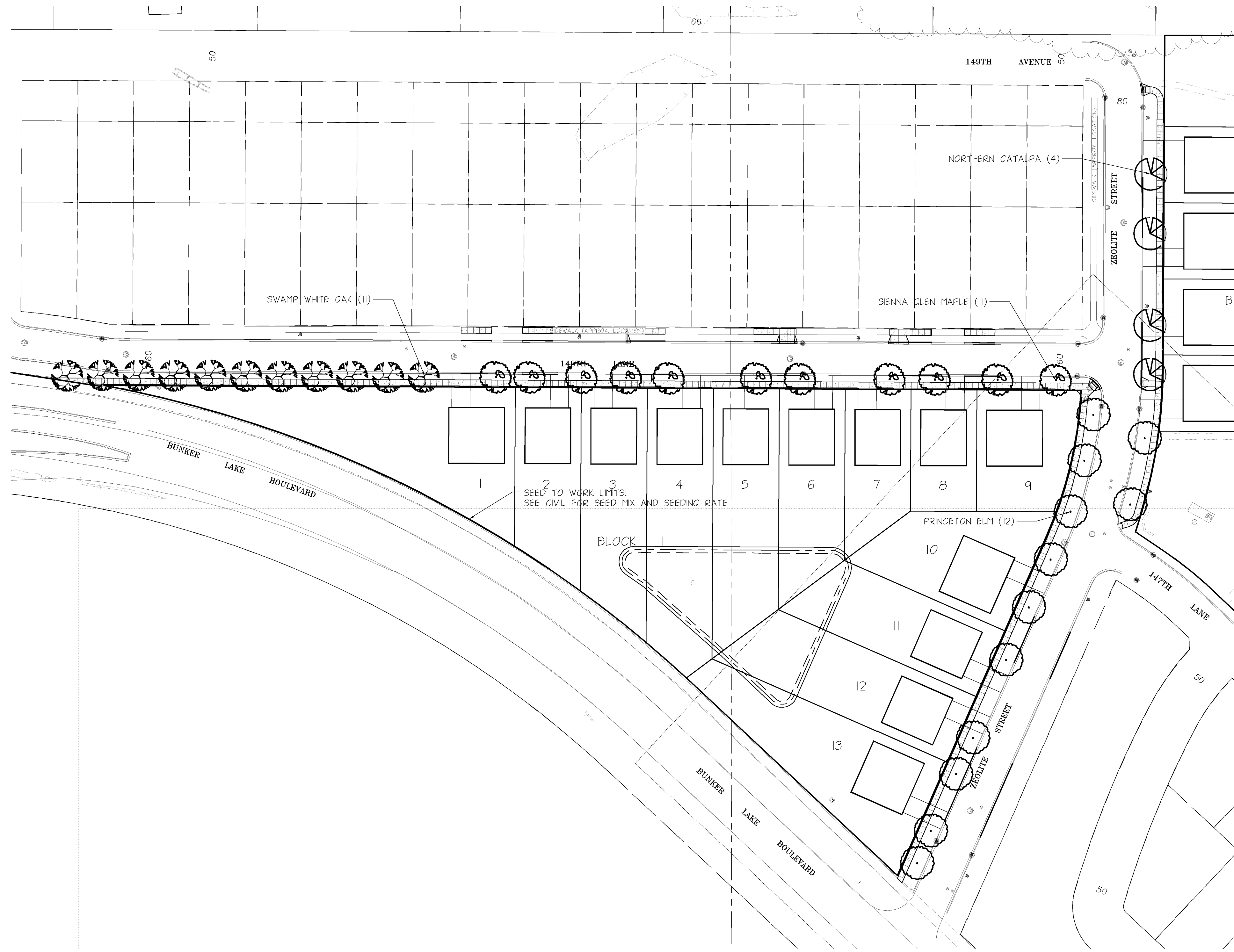
105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

FILE NAME C702RAM021.DWG

PROJECT NO. RAM12021 RAM12024

CIVIL CONSTRUCTION  
 DETAILS

**C7.3**



**DEVELOPER**  
**RAMSEY HRA**  
 7560 SUNWOOD DRIVE  
 RAMSEY, MN 55303  
 TEL (763) 427-1410 - FAX (763) 427-5543

**MUNICIPALITY**  
  
**PROJECT**  
**NORTH COMMONS (COR THREE)**  
 RAMSEY, MINNESOTA

**SHEET INDEX**

SHEET	TITLE
C01	CIVIL TITLE SHEET
C11	EXISTING CONDITIONS
C12	DEVELOPMENT PLAN
C21	SITE PLAN
C31	GRADING, DRAINAGE, PAVING & EROSION CONTROL
C32	SWPPP NOTES
C41	UTILITIES
C71	CIVIL CONSTRUCTION DETAILS
C72	CIVIL CONSTRUCTION DETAILS
C73	CIVIL CONSTRUCTION DETAILS
L21	LANDSCAPE PLAN

**REVISION HISTORY**  
 CONTACT ENGINEER FOR ANY PRIOR HISTORY

DATE	REVISION	REVIEW
06 JUN 2012	PRELIMINARY PLAN SUBMITTAL	CNC
03 JUL 2012	CITY PERMIT SUBMITTAL	CNC

**PROJECT MANAGER REVIEW**  
 \_\_\_\_\_  
 \_\_\_\_\_  
**CERTIFICATION**

NOT FOR CONSTRUCTION

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED UNAUTHORIZED. READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

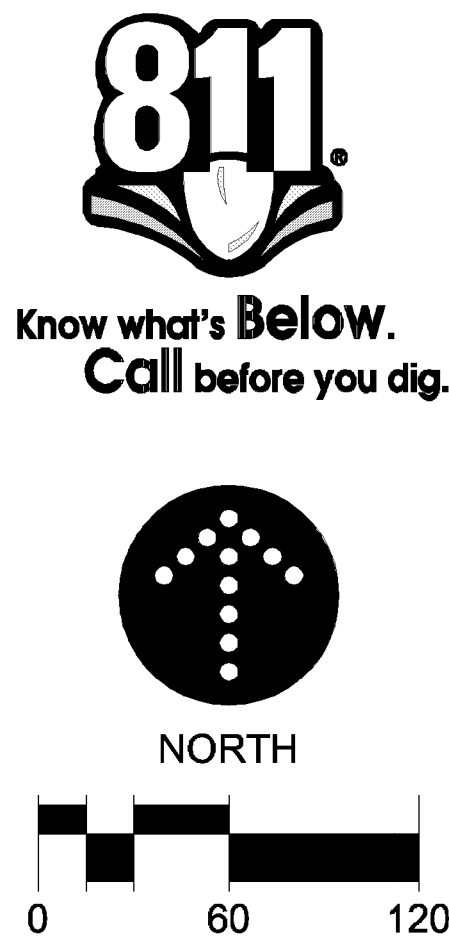
**CITY PERMIT SUBMITTAL**  
 3 JULY 2012

**LANDFORM**  
 From Site to Finish

105 South Fifth Avenue Tel: 612-252-9070  
 Suite 513 Fax: 612-252-9077  
 Minneapolis, MN 55401 Web: landform.net

FILE NAME L201RAM021.DWG  
 PROJECT NO. RAM12021/RAM12024

**LANDSCAPE PLAN**  
**L2.1**



**LANDSCAPE NOTES**

- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES **72** HOURS PRIOR TO BEGINNING.
- COORDINATE INSTALLATION WITH CONTRACTORS PERFORMING RELATED WORK.
- SEED MIXTURE MNDOT #190 AS DEFINED IN CURRENT **MNDOT SEEDING MANUAL**. SEED SHALL BE OF **MINNESOTA** ORIGIN AND CERTIFIED BY THE **MINNESOTA CROP IMPROVEMENT ASSOCIATION (MCA)**. PROVIDE VERIFYING DOCUMENTATION TO THE OWNER **30** DAYS MINIMUM PRIOR TO INSTALLATION.
- PLANT MATERIAL SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE OF HARDY STOCK, FREE FROM DISEASE, INFESTATION, DAMAGE, AND DISFIGURATION. FOR DISCREPANCY BETWEEN THE NUMBER OF PLANTS ON THE SCHEDULE AND THE NUMBER SHOWN ON THE DRAWING, THE DRAWING SHALL GOVERN.
- PLANTING SOIL SHALL CONSIST OF **4** PARTS TOPSOIL TO **1** PART PEAT HUMUS, WITH **3** POUNDS OF COMMERCIAL FERTILIZER ADDED PER CUBIC YARD.
- SPREAD A MINIMUM OF **4** INCHES OF TOPSOIL AND **SEED** ALL TURF AREAS DISTURBED BY CONSTRUCTION.
- FOLLOW **MNDOT SEEDING MANUAL** FOR PLANTING INSTRUCTIONS FOR ESTABLISHMENT OF SEED AND PROVIDE COORDINATION FOR REQUIRED EROSION PREVENTION AND SEDIMENT CONTROL.
- PLACE PLANTS ACCORDING TO LAYOUT WITH PROPER NOMINAL SPACING.
- SEE DETAILS FOR DEPTH OF PLANTING SOIL.
- INSTALL A 4-FOOT DIAMETER SHREDDED HARDWOOD BARK MULCH DISH AROUND TREES NOT PLACED WITHIN A SHRUB OR PERENNIAL PLANTING BED.

**PLANT SCHEDULE**

QTY.	SYMBOL	COMMON NAME	SCIENTIFIC NAME	PLANTING SIZE	ROOT COND.	SPACING
<b>DECIDUOUS TREES</b>						
11		SWAMP WHITE OAK	QUERCUS BICOLOR	2.5' CAL.	B&B	35' O.C.
4		NORTHERN CATALPA	CATALPA SPECIOSA	2.5' CAL.	B&B	35' O.C.
12		PRINCETON ELM	ULMUS AMERICANA 'PRINCETON'	2.5' CAL.	B&B	35' O.C.
11		SIENNA GLEN MAPLE	ACER X FREEMANI 'SIENNA'	2.5' CAL.	B&B	35' O.C.