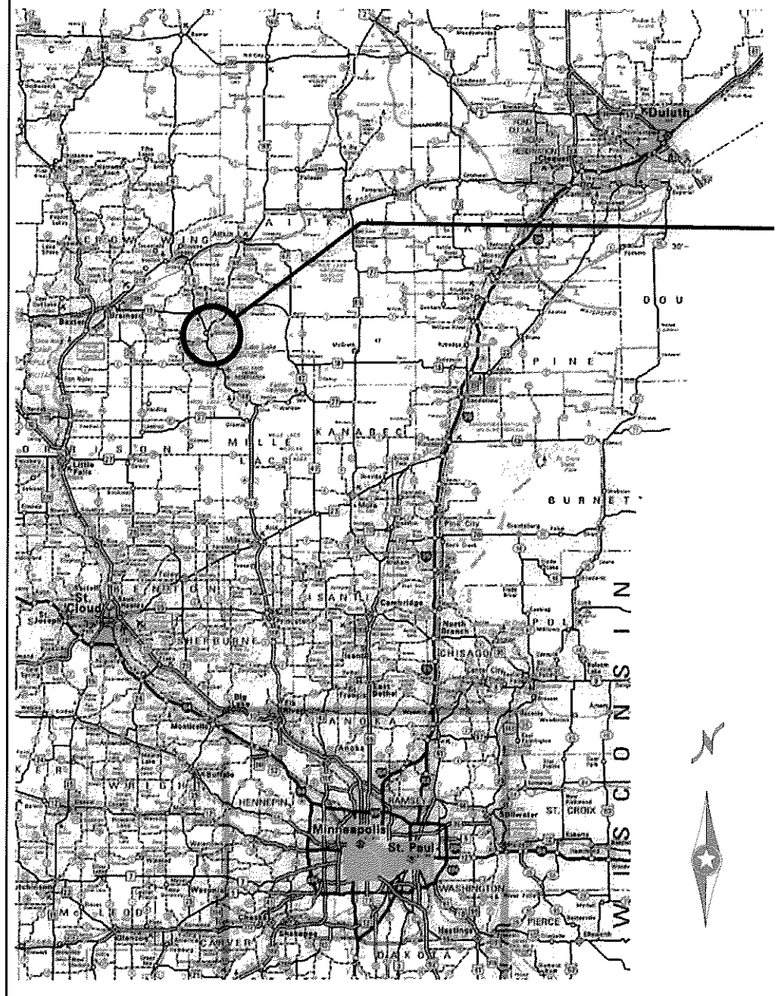
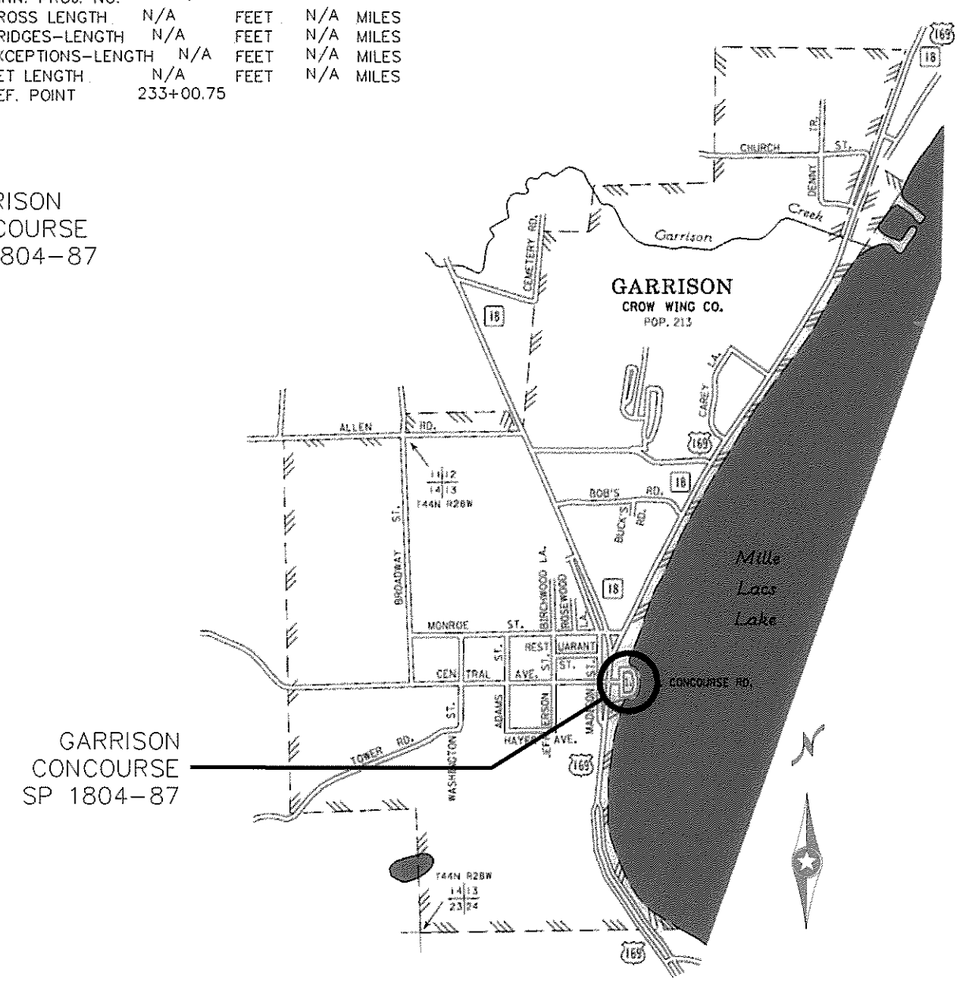
MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GARRISON CONCOURSE OVERLOOK SITE RESTORATION AND ADA IMPROVEMENTS

LOCATED ON T.H. 169 AT T.H. 18

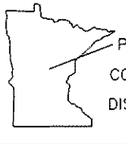
STATE PROJ. NO.	1804-87			
MINN. PROJ. NO.	N/A			
GROSS LENGTH	N/A	FEET	N/A	MILES
BRIDGES-LENGTH	N/A	FEET	N/A	MILES
EXCEPTIONS-LENGTH	N/A	FEET	N/A	MILES
NET LENGTH	N/A	FEET	N/A	MILES
REF. POINT	233+00.75			





PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

DESIGN DESIGNATION - TIER NO.



PROJECT LOCATION
COUNTY : CROW WING
DISTRICT : 3

FOR PLANS & UTILITIES SYMBOLS SEE TECHNICAL MANUAL

PROJ. NO 1804-87

CHARGE IDENTIFIER

FED. PROJ. NO. STPX 1813(097)

GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET 12 HAS BEEN DELETED

THIS PLAN CONTAINS 24 SHEETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

PROJECT ARCHITECT: Todd Grover

DATE: AUGUST 21, 2012 LIC.NO.: 43014

RECOMMENDED FOR APPROVAL BY: Dan Carlson 8/31 20 12
DISTRICT TRANSPORTATION ENGINEER

RECOMMENDED FOR APPROVAL BY: Thomas Dunn 9/4 20 12
DISTRICT TRAFFIC ENGINEER

RECOMMENDED FOR APPROVAL BY: Carol Reamer 9/5 20 12
PRINCIPAL LANDSCAPE ARCHITECT

RECOMMENDED FOR APPROVAL BY: Valerie W. Swanson 9/22 20 12
STATE PRE-LETTING ENGINEER
TRS MS

OFFICE OF LAND MANAGEMENT APPROVAL BY: for Jeremy Mehrkens 10/ 20 12
DIRECTOR, OFFICE OF LAND MANAGEMENT

APPROVED: for Jeremy Mehrkens 10/8 20 12
STATE DESIGN ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS IF ANY OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED DESIGN PROFESSIONAL UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME LIC.NO.

DATE SIGNATURE

7-8-10-TRS

DATE MODIFIED: AUGUST 21, 2012	DRAWN BY: TAG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE:
	CHECKED BY: TAG		PRINTED NAME: TODD GROVER
FILE SERVER LOCATION: M:\Projects\Garrison Concourse\Construction Documents\Garrison.dwg			DATE: AUGUST 21, 2012 LIC. NO. 43014

MacDONALD & MACK ARCHITECTS

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

GARRISON CONCOURSE OVERLOOK - CITY OF GARRISON
TITLE SHEET

STATE PROJECT 1804-87 (TH169=018) | SHEET NO. 1 OF 24 SHEETS

STATEMENT OF ESTIMATED QUANTITIES

ITEM NUMBER	ITEM	NOTE NUMBER	UNIT	TOTAL ESTIMATED QUANTITY
2021.501	MOBILIZATION		LUMP SUM	1
2101.511	CLEARING AND GRUBBING		LUMP SUM	1
2104.501	REMOVE CONCRETE CURB (P)		LIN FT	292
2104.503	REMOVE CONCRETE WALK (P)	(1)	SQ FT	666
2104.505	REMOVE CONCRETE WALK (P)	(2)	SQ YD	536
2104.505	REMOVE BITUMINOUS PAVEMENT (P)		SQ YD	3454
2104.513	SAWING BIT PAVEMENT (FULL DEPTH)		LIN FT	98
2104.521	SALVAGE STONE CURB	(3)	LIN FT	1286
2104.523	SALVAGE CASTING		EACH	4
2104.525	ABANDON CATCH BASIN		EACH	2
2104.602	RELOCATE BENCH	(5)	EACH	2
2104.618	SALVAGE STONE PAVERS	(3)	SQ FT	6000
2104.618	REMOVE STONE	(6)	SQ FT	20
2105.501	COMMON EXCAVATION		CU YD	3587
2105.525	TOPSOIL BORROW (LV)	(7)	CU YD	177
2105.526	SELECT TOPSOIL BORROW (LV)	(7)	CU YD	128
2105.604	GEOTEXTILE FILTER TYPE V		SQ YD	539
2211.503	AGGREGATE BASE (CV) CLASS 5	(8)	CU YD	576
2211.503	AGGREGATE BASE (CV) CLASS 2 MOD	(9)	CU YD	245
2301.531	EXPANSION JOINTS DESIGN SPECIAL	(10)	LIN FT	400
2360.503	TYPE SP 12.5 WEAR CRS MIX (2,C) 2.0" THICK	(11)	SQ YD	6908
2451.511	COARSE FILTER AGGREGATE (CV)		CU YD	45
2451.513	FINE FILTER AGGREGATE (LV)	(12)	CU YD	643
2502.521	6" PVC PIPE DRAIN	(13)	LIN FT	359
2502.541	4" PERF PVC PIPE DRAIN	(13)	LIN FT	367
2502.602	4" PVC PIPE DRAIN CLEANOUT	(14)	EACH	6
2506.521	INSTALL CASTING		EACH	4
2506.522	ADJUST FRAME AND RING CASTING	(15)	EACH	2
2506.602	CONNECT INTO EXISTING DRAINAGE STRUCTURE		EACH	4
2521.501	6" CONCRETE WALK		SQ FT	719
2531.501	CONCRETE CURB AND GUTTER DESIGN B624		LIN FT	292
2531.603	CONCRETE CURB DESIGN V		LIN FT	84
2531.618	TRUNCATED DOMES		SQ FT	26
2540.602	RELOCATE MISCELLANEOUS STRUCTURE	(4)	EACH	2
2540.602	BENCH	(18)	EACH	6
2540.603	LANDSCAPE EDGER	(19)	LIN FT	1880
2541.603	RESTORE HISTORIC CURB	(20)	LIN FT	1286
2541.618	INSTALL STONE	(21)	SQ FT	20
2541.618	REPOINT HISTORIC STRUCTURE	(22)	SQ FT	800
2541.618	CLEAN HISTORIC STRUCTURE	(23)	SQ FT	800
2541.618	RESTORE HISTORIC PAVERS	(24)	SQ FT	4848
2563.601	TRAFFIC CONTROL		LUMP SUM	1
2571.502	DECIDUOUS TREE 2.5" CAL B&B		TREE	8
2571.505	DECIDUOUS SHRUB NO 5 CONT		SHRUB	204
2571.602	TREE PROTECTION		EACH	12
2573.502	SILT FENCE, TYPE HEAVY DUTY		LIN FT	150
2573.530	STORM DRAIN INLET PROTECTION		EACH	6
2575.505	SODDING TYPE SALT RESISTANT	(25)	SQ YD	784
2575.521	EROSION CONTROL NETTING	(26)	SQ YD	336
2575.550	COMPOST GRADE 2	(27)	CU YD	107

STATEMENT OF ESTIMATED QUANTITIES NOTES:

1. INCLUDES THE EXISTING CONCRETE WALKS AT THE FIBERGLASS WALLEYE MONUMENT, THE WALK TO THE STONE MONUMENT, AND THE WALK TO THE VISITORS INFORMATION BOOTH.
2. INCLUDES THE WALK, CURB AT DRIVE, AND THE CURB AT THE WALL AT THE OVERLOOK WALL THAT WAS PLACED OVER EXISTING STONE PAVERS AND CURB. EXISTING PAVERS AND CURB REMAIN UNDER THE CONCRETE WALK. REMOVAL OF THE CONCRETE WALK AND CURBS MUST BE DONE IN A MANNER THAT WILL NOT DAMAGE THE UNDERLYING PAVERS, CURB, AND ADJACENT HISTORIC WALL.
3. INCLUDES EXISTING, HISTORIC MATERIALS ON-SITE THAT ARE IN GOOD CONDITION AS DETERMINED BY THE HISTORIC ARCHITECT – AS INDICATED ON THE DRAWINGS OR IN THE FIELD PRIOR TO COMMENCEMENT. MATERIALS WILL BE DISMANTLED WITHOUT DAMAGE AND STORED FOR REINSTALLATION DURING RESTORATION WORK. DOCUMENT THE LOCATION OF EACH STONE PRIOR TO DISMANTLING WHERE RESTORATION WORK REQUIRES THE STONE BE PLACED IN THE SAME LOCATION.
4. THE FIRST MONUMENT TO BE RELOCATED IS THE FIBERGLASS WALLEYE FISH AND BASE. THE WORK WILL ENTAIL THE REMOVAL OF THE MONUMENT FROM ITS EXISTING LOCATION AND THE MOVING OF THE MONUMENT, WITHOUT DAMAGE, TO THE NEW LOCATION, SEE SHEET 11. THE MONUMENT IS CURRENTLY ATTACHED TO THE CONCRETE PAD AT THE BASE WITH ANCHOR BOLTS AND THIS SAME CONNECTION METHOD WILL BE USED AT THE NEW LOCATION. THE SECOND MONUMENT TO BE RELOCATED IS THE TAUER MONUMENT. THE WORK WILL ENTAIL THE EXCAVATION AND REMOVAL OF THE MONUMENT FROM ITS EXISTING LOCATION AND MOVING THE MONUMENT, WITHOUT DAMAGE, TO THE NEW LOCATION ON SHEET 11. THE MONUMENT WILL BE PLACED IN THE SAME MANNER AS CURRENTLY EXISTS.
5. RELOCATE EXISTING BENCHES ON SITE. INCLUDES THE CONCRETE BENCH SEATS AND STONE SUPPORTS. STONE SUPPORTS TO BE LABELED, DISMANTLED, CLEANED AND REBUILT IN NEW LOCATION.
6. INCLUDES EXISTING, HISTORIC MATERIALS ON-SITE THAT ARE DETERIORATED AND CANNOT BE REUSED AS DETERMINED BY THE HISTORIC ARCHITECT – AS INDICATED ON THE DRAWINGS OR IN THE FIELD PRIOR TO COMMENCEMENT. MATERIALS WILL BE DISMANTLED AND DISPOSED.
7. TOPSOIL BORROW (LV) TO BE USED FOR SOD INSTALLATION. SELECT TOPSOIL BORROW (LV) TO BE USED FOR PLANT INSTALLATION.
8. FOR PLACEMENT UNDER BITUMINOUS PAVEMENT, STONE PAVERS, CURBING AND CONCRETE WALK.
9. FOR STABILIZED AGGREGATE WALKS ON ISLAND. 100% CRUSHED GRANITE MIX WITH PORTLAND CEMENT (INCIDENTAL) PER DETAIL 1/21.
10. FURNISH AND INSTALL AT PAVER/WALL AND WALL/PIER INTERSECTION. SEE DETAILS 2/24 AND 5/24.
11. TACK COAT IS INCIDENTAL.
12. QUANTITY INCLUDES THAT REQUIRED FOR DRAINAGE BED AND FOR MIXING WITH COMPOST FOR DRAINAGE MEDIUM AND PLANTING MEDIUM.
13. INCLUDES WYES, EXTRA PIPE, ALL CONNECTIONS AND COUPLINGS, AND GEOTEXTILE FABRIC TYPE I (INCIDENTAL).
14. FURNISH AND INSTALL SOLID CAP AT GRADE (INCIDENTAL).
15. TO BE ADJUSTED TO NEW DRIVE ELEVATION.
16. THESE PEDESTRIAN RAMPS USE HISTORIC/SALVAGED AND NEW PAVERS FOR THE FLARE PORTIONS OF THE RAMP. SEE DETAIL 1/22.
17. THESE PEDESTRIAN ACCESS POINTS USE A CONCRETE STRAIGHT RUN WITH INTEGRATED CONCRETE CURB AT TURF EDGE. HISTORIC STONE CURB IS PLACED BETWEEN THE TURF/CONCRETE AND THE BITUMINOUS DRIVE. SEE DETAILS 2/22 AND 1/23.
18. BENCH MUST MATCH EXISTING BENCH IN STYLE AND CONSTRUCTION. EXISTING BENCH IS A PRE-CAST CONCRETE SEAT WITH TWO STONE SUPPORTS. STONE SUPPORTS ARE CUT AND SHAPED GRANITE TO MATCH EXISTING. BENCHES INCLUDE 4 STRAIGHT SEAT BENCHES AND 2 CURVED SEAT BENCHES, SEE DETAILS 6/24.
19. STEEL EDGER. SUBMIT FOR APPROVAL. SEE DETAILS SHEET 21.
20. INCLUDES THE REBUILDING OF STONE CONSTRUCTION USING SALVAGED STONE FROM PREVIOUS OPERATIONS. PLACE STONE IN THE SAME LOCATION AS DOCUMENTED PRIOR TO DISMANTLING. SEE SHEET 24.
21. INCLUDES NEW MATERIAL AND LABOR NECESSARY TO INSTALL STONE AT AREAS WHERE DETERIORATED STONE WAS REMOVED OR STONE WAS MISSING. INSTALLATION INCLUDED THE SELECTING, SHAPING, AND PLACEMENT OF STONE TO REPLICATE CHARACTER OF HISTORIC STONE WHERE STONE WAS REMOVED OR CHARACTER OF ADJACENT STONE CONSTRUCTION WHERE STONE WAS MISSING.
22. REPOINT WALL 100% AT THE BASE OF THE WALL WHERE THE CONCRETE WALKWAY WAS REMOVED TO 1 FOOT BELOW HISTORIC PAVER LEVEL. THE EXCAVATION OF 1' TO FACILITATE REPOINTING IS INCIDENTAL. SEE SHEET 24 FOR DETAILS.
23. AFTER THE CONCRETE WALK IS REMOVED, CLEAN LOWER WALL OF CEMENT STAINS PRIOR TO RESTORING AND REPOINTING STONE.
24. INCLUDES THE REBUILDING OF STONE PAVER CONSTRUCTION USING SALVAGED STONE FROM PREVIOUS OPERATIONS. PLACE STONE IN THE SAME LOCATION AS DOCUMENTED PRIOR TO DISMANTLING. SEE SHEET 15 FOR GRADING AND SLOPES.
25. PER MNDOT 3878. SOD BED PREPARATION AND 45 DAY MAINTENANCE PERIOD ARE INCIDENTAL.
26. TYPE I. FURNISH AND INSTALL WITHIN 3' OF BOTH SIDES OF AGGREGATE WALKS UNDER SOD.
27. FOR MIXING WITH FINE FILTER AGGREGATE FOR DRAINAGE MEDIUM AND PLANTING MEDIUM.

GENERAL NOTES:

1. THIS PROJECT WILL RESTORE THE HISTORIC CONCOURSE SITE MATCHING ORIGINAL DESIGN AND MATERIALS AS SHOWN IN THE PLAN. THE PROJECT WILL ALSO RELOCATE EXISTING SITE ELEMENTS (FIBERGLASS WALLEYE MONUMENT, THE TAUER MONUMENT, AND VISITORS INFORMATION BOOTH).
2. ALL WORK AND MATERIALS MUST BE IN ACCORDANCE WITH THE SECRETARY OF INTERIOR'S STANDARDS AND WILL BE STRICTLY ENFORCED. ANY WORK IN ADDITION MUST BE APPROVED IN ADVANCE OF WORK.
3. STONE PAVER REPLACEMENT SHALL BE OF THE SAME SIZE, COLOR, TEXTURE, FINISH, PATTERN, AND APPEARANCE OF HISTORIC STONE SHOWN ON IMAGES OR EXISTING ON SITE.
4. USE BEST MANAGEMENT PRACTICES TO PROTECT WATER QUALITY. FOR EXAMPLE, CONTROL THE SPREAD OF DUST AND MORTAR MATERIAL AND AVOID ALLOWING ANY MORTAR MATERIAL OR WASTE TO ENTER "WATERS OF THE STATE" (INCLUDES CATCH BASINS, DITCHES, ETC). ALL MORTAR WASTE SHALL BE REMOVED FROM THE PROJECT AND DISPOSED PER MNDOT 1717.
5. CONTRACTOR IS RESPONSIBLE FOR CONFIRMATION OF MATERIAL QUANTITIES REQUIRED.
6. REMOVE AND DISPOSE OF ALL DEBRIS PER MNDOT 1717.
7. ALL DIMENSIONS AND SLOPES ARE AS SHOWN ON TYPICAL SECTIONS EXCEPT AS SHOWN ELSEWHERE ON THE PLAN.
8. PROPERTY TO DRAIN TO DISCHARGE POINTS.

GARRISON CONCOURSE PUBLIC UTILITIES

MILLE LACS ENERGY COOPERATIVE	RELOCATE OVERHEAD POWER
FRONTIER COMMUNICATIONS OF MINNESOTA	RELOCATE SERVICE LINE
MINNESOTA DEPARTMENT OF TRANSPORTATION	NO IMPACT

UTILITY NOTES:

1. OVERHEAD ELECTRICAL LINES WILL BE RELOCATED WITH BURIED POWER BY OTHERS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THE "GOPHER ONE CALL EXCAVATION NOTICE" (1-800-252-1166) REQUIRED BY MINNESOTA STATUTE 216D.
3. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL QUALITY D. THE UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE".

STANDARD PLATES

NOTE: THE FOLLOWING STANDARD PLATES APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

4026A	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4108F	ADJUSTING RINGS FOR CATCH BASINS AND MANHOLES
7038A	DETECTABLE WARNING SURFACE – DOMES ONLY
7100H	CONCRETE CURB AND GUTTER
8000I	STANDARD BARRICADES

DATE MODIFIED: AUGUST 23, 2012 | DRAWN BY: TAG | CHECKED BY: TAG

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SIGNATURE: _____
PRINTED NAME: TODD GROVER
DATE: AUGUST 23, 2012 LIC. NO. 43014

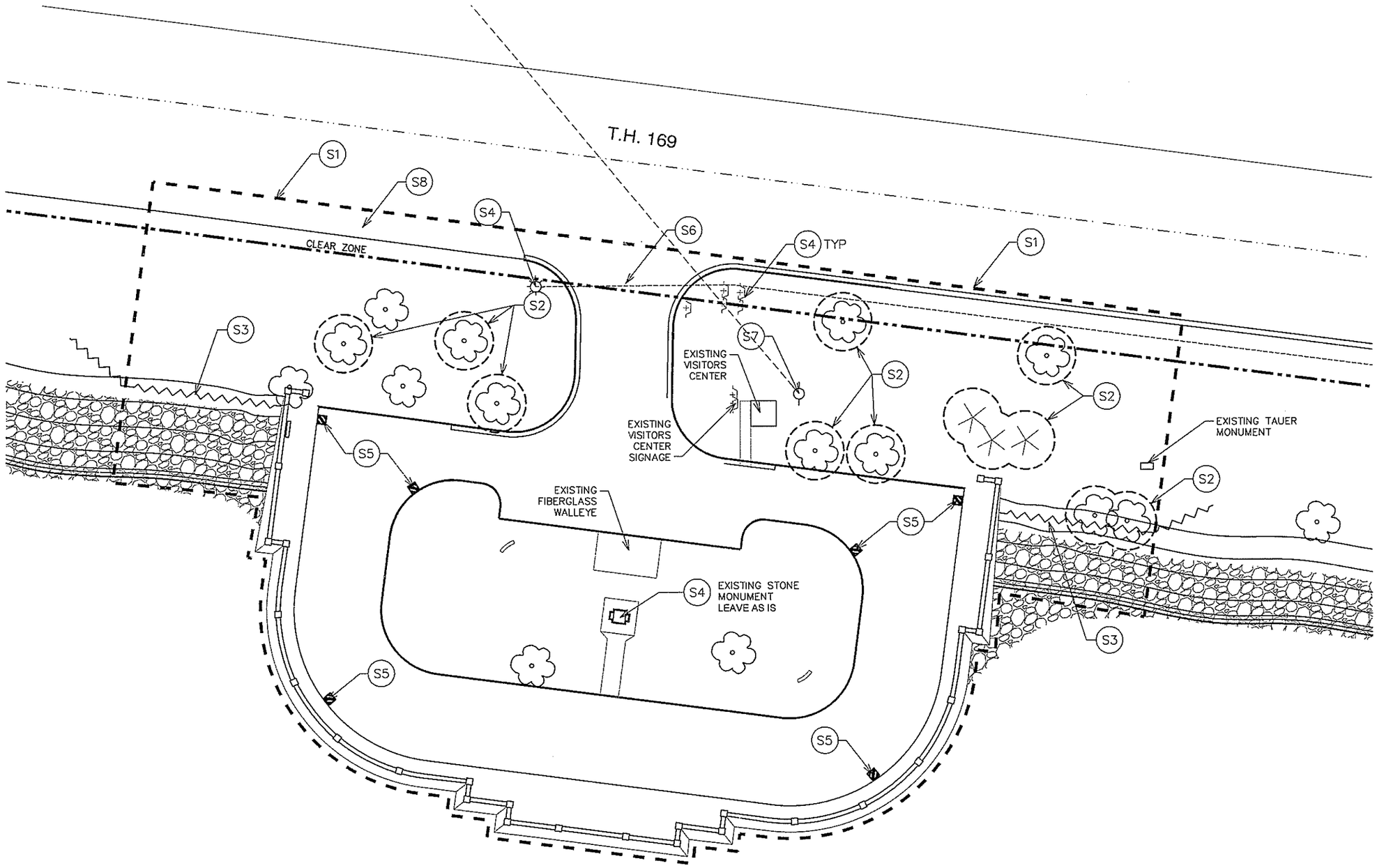
MacDONALD & MACK ARCHITECTS

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
STATEMENT OF ESTIMATED QUANTITIES AND STD PLATES

STATE PROJECT 1804-87 (TH169) | SHEET NO. 2 OF 24 SHEETS



KEY NOTES:

(S1) CONSTRUCTION LIMITS

(S2) TREE PROTECTION: PROTECT TREES WITHIN CONSTRUCTION LIMITS. SEE SHEET 5.

(S3) SILT FENCE: PLACE SILT FENCE ABOVE RIP RAP AT NORTHERN AND SOUTHERN END OF OVERLOOK AS INDICATED ON PLAN.

(S4) SITE PROTECTION: PROTECT EXISTING MARKER, SIGNS, AND LIGHT POLE.

(S5) STORM DRAIN INLET PROTECTION: PLACE AT CATCH BASIN. SEE SHEET 6.

(S6) BARRICADE: PLACE TWO G20-X1 CLOSURE NOTICE 54"X48" READING: "OVERLOOK CLOSED".

(S7) EXISTING ELECTRICAL POLE: EXISTING ELECTRICAL POLE, OVERHEAD ELECTRICAL AND COMMUNICATIONS LINES WILL BE REPLACED WITH BURIED POWER BY OTHERS.

(S8) TRAFFIC CONTROL: THE RIGHT TURN LANE SHALL BE CLOSED IN ACCORDANCE WITH TEMPORARY TRAFFIC, CONTROL ZONE LAYOUTS FIELD MANUAL. LAYOUT NUMBER 27.

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. REPORT UNFORESEEN CONDITIONS AND DISCREPANCIES TO ARCHITECT.
2. DO NOT SCALE DRAWINGS. USE PLAN INFORMATION, DIMENSIONS, DETAILS, SHOP DRAWINGS, AND FIELD VERIFICATION.
3. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL BMP'S THROUGHOUT THE PROJECT.

LEGEND:

- CONSTRUCTION LIMITS
- CLEAR ZONE
- OVERHEAD ELECTRICAL LINE
- UNDERGROUND ELECTRICAL LINE
- SILT FENCE
- RIP RAP
- HISTORIC WALL
- CATCH BASIN
- SIGN
- DECIDUOUS TREES
- CONIFEROUS TREES

1 | EXISTING CONDITIONS AND SITE PROTECTION PLAN

0 25 50 SCALE IN FEET

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DATE MODIFIED: AUGUST 23, 2012	DRAWN BY: TAG CHECKED BY: TAG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: PRINTED NAME: TODD GROVER DATE: AUGUST 23, 2012 LIC. NO. 43014	MACDONALD & MACK ARCHITECTS	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899
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GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
EXISTING CONDITIONS AND SITE PROTECTION PLAN

STATE PROJECT 1804-87 (TH169) | SHEET NO. 3 OF 24 SHEETS

GARRISON CONCOURSE SITE RESTORATION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TH169 IN GARRISON, CROW WING COUNTY. THIS PROJECT WILL RESTORE THE CONCOURSE SITE AND RENOVATE EXISTING ELEMENTS MATCHING ORIGINAL CONSTRUCTION AND MATERIALS DESIGNATED HISTORIC. THE INTENT IS TO RESTORE THE HISTORIC SITE.

AREA DISTURBED IS 1.5 ACRES AND INCLUDES THE DRIVE SIDE OF THE STONE WALL, THE DRIVE, ACCESS FROM TH169, ISLAND, DITCHES, STAGING AREAS, AND ACCESS TO SITE FROM TH169. THERE WILL BE NO CHANGE IN IMPERVIOUS SURFACE.

THE FOLLOWING SPECIAL OR IMPAIRED WATERS ARE WITHIN 1 MILE OF THIS PROJECT:
LAKE MILLE LACS – IMPAIRED FOR MERCURY.

THE ULTIMATE RECEIVING WATER IS LAKE MILLE LACS BY DIRECT DISCHARGE, GROUND WATER INFILTRATION, DITCHES, CURB AND GUTTER INLETS, AND CULVERTS THE POTENTIAL POLLUTANTS GENERATED FROM THIS WORK INCLUDE THE FOLLOWING: STONE DUSTS, MASONRY AND MORTAR DUSTS, PORTLAND CEMENT, HYDRATED LIME, MORTAR PIGMENTS, FUELS, SOLVENTS, CLEANING/DETERGENT AGENTS, SEDIMENTS, HOT WATER, AND OILS FROM BITUMINOUS.

PROJECT CONTACTS

MN/DOT RESIDENT ENGINEER (DISTRICT 3)	TONY HUGHES	218-828-5735
MN/DOT CONSTRUCTION PROJECT MANAGER (HISTORIC)	KATHRYN McFADDEN	651-366-4641
MN/DOT DNR LIAISON	PETER LEETE	651-366-3634
MN DNR – AREA HYDROLOGIST	JOE OSCHWALD	218-833-8687
USACE – CROW WING COUNTY PROJECT MANAGERS	LEO GRABOWSKI	651-290-5357
CROW WING COUNTY SOIL AND WATER CONSERVATION DISTRICT – WCA LGU	KEITH POHL	218-828-6197
CROW WING – PLANNING AND ZONING	BONNIE FINNERTY	218-824-1125
MPCA	SCOTT LUCAS	218-316-3874
MPCA – 24 HR EMERGENCY NOTIFICATION STATE DUTY OFFICER		651-649-5451 800-422-0798
Mn/DOT EROSION CONTROL	BRENT TROYER	651-366-3629
EROSION CONTROL SUPERVISOR	TBD	

BMP INSTALLATION, MAINTENANCE AND OPERATIONS:
THE ENTIRE PROJECT SHALL USE THE SITE PLAN PROCESS AS PER Mn/DOT 1717. ADDITIONAL SITE PLANS SHALL BE SUBMITTED WHEN REQUESTED BY THE PROJECT ENGINEER OR AS INDICATED IN THE PLAN. Mn/DOT 1717 SITE PLANS SHALL BE DEVELOPED BY THE CONTRACTOR PRIOR TO ANY WORK ADJACENT TO LAKE MILLE LACS, AND ALL STONE CUTTING, MORTAR GRINDING, AND STONE CLEANING OPERATIONS. IT IS EXPECTED THAT THE CONTRACTOR USE BEST MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF FUGITIVE DUSTS BY USE OF WATER MISTS OR PLASTIC SHROUDS AND VACUUMS.

FINAL TURF RESTORATION SHALL BE AS PER PRE-EXISTING CONDITION, AS CERTIFIED SALT TOLERANT SOD OR EQUIVALENT.

THE CONTRACTOR SHALL DEVELOP A QUALITY ASSURANCE PROGRAM AS PER 1717. THE CONTRACTOR SHALL PERFORM DAILY INSPECTIONS AND CORRECT ANY EROSION AND SEDIMENT CONTROL DEFICIENCIES, INCLUDING THOSE DISCOVERED AFTER EVERY 0.5 INCH RAIN EVENT. THE INSPECTION REPORT SHALL BE IN WRITING ALONG WITH PHOTOGRAPHS, AND SUBMITTED TO THE PROJECT ENGINEER EVERY WEEK DURING SOIL DISTURBANCE OPERATIONS. ONCE THE SITE HAS BEEN STABILIZED, THE INSPECTIONS SHALL BE DONE EVERY 30 DAYS, OR UNTIL 70 PERCENT PERENNIAL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER THE WHOLE SITE. THE CONTRACTOR IS REMINDED TO TERMINATE THE PERMIT COVERAGE WITHIN 30 DAYS OF MEETING THE NPDES REQUIREMENTS, IF APPLICABLE.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL BMPs THROUGHOUT THE PROJECT.

RECEIVING SURFACE WATERS AND ENVIRONMENTALLY SENSITIVE AREAS:
THE RECEIVING WATER FOR STORM WATER RUNOFF FROM THIS PROJECT IS MILLE LACS LAKE. MILLE LACS LAKE LISTED AS IMPAIRED ON THE MPCA'S CWA 303D UST OF IMPAIRED WATERS. THE IMPAIRMENT IS MERCURY.

MILLE LACS LAKE IS CONSIDERED DNR PROTECTED WATER. NO WORK SHALL OCCUR WITHIN MILLE LACS LAKE BETWEEN APRIL 15 AND JUNE 1 TO MINIMIZE IMPACTS ON FISH SPAWNING AND MIGRATION. THE DNR FISHERIES SUPERVISOR MAY BE CONTACTED ABOUT WAIVING WORK EXCLUSION DATES WHERE WORK IS ESSENTIAL OR WHERE IT CAN BE DEMONSTRATED THAT A PROJECT WILL MINIMIZE IMPACTS TO HABITAT AND SPAWNING.

INVASIVE SPECIES:
EURASIAN WATERMILFOIL. SPINY WATER FLEA, CURLY-LEAF PONDWEED, AND ZEBRA MUSSELS ARE PRESENT WITHIN MILLE LACS LAKE. IN ORDER TO PREVENT THE SPREAD OF INVASIVE SPECIES, ALL EQUIPMENT INTENDED FOR USE AT THE PROJECT MUST BE INSPECTED BY MN/DOT PRIOR TO USE AND MUST POSSESS DOCUMENTATION OF LAST USE AND THAT DOCUMENTATION PROTOCOLS WERE FOLLOWED.. FOLLOWING USE, ALL VISIBLE AQUATIC REMNANTS (PLANTS, SEEDS, MUD, SOIL, AND ANIMALS) MUST BE REMOVED FROM ALL EQUIPMENT THAT HAD BEEN IN CONTACT WITH THE LAKE. EQUIPMENT MUST BE TREATED AS FOLLOWS:

CLEAN BEFORE BEING TRANSPORTED FROM THE PROJECT SITE. POWER WASHING/SPRAYING. PREFERABLE WITH HOT WATER (FOLLOWED BY DRYING FOR 7 DAYS) IS AN ACCEPTABLE METHOD TO ENSURE KILLING AND REMOVING OF INVASIVE SPECIES.

DRAIN BEFORE TRANSPORTING FROM WORK SITE. DRAIN ALL WATER FROM EQUIPMENT WHERE WATER MAY BE TRAPPED SUCH AS TANKS, PUMPS, HOSES, SILT CURTAIN, AND WATER-RETAINING COMPONENTS OF BOATS/BARGES.

DRY AFTER SPRAYING AND DRAINING. DRY EQUIPMENT THAT HAS BEEN IN INFESTED WATERS FOR A MINIMUM OF 7 DAYS BEFORE RE-USE OR HAULING AWAY.

CONTACT PETER LEETE, DNR TRANSPORTATION HYDROLOGIST AT PETERLEETE@STATE.MN.US OR (651) 366-3634 IF THE CONDITIONS ABOVE ARE NOT ABLE TO BE MET.

RARE PLANT OR ANIMAL SPECIES:
BLANDINGS TURTLES, A STATE-LISTED ENDANGERED AND THREATENED SPECIES, HAVE BEEN REPORTED IN THE VICINITY Of THE PROJECT AND MAY BE ENCOUNTERED ON-SITE. IF BLANDINGS TURTLES ARE FOUND ON SITE, STATE LAW AND RULES PROHIBIT THE DESTRUCTION OF THREATENED OR ENDANGERED SPECIES. IF TURTLES ARE IN IMMINENT DANGER, THEY SHOULD BE MOVED BY HAND OUT OF HARM'S WAY. OTHERWISE THEY SHOULD BE LEFT UNDISTURBED. A BLANDINGS TURTLE FACT SHEET THAT DESCRIBES THE HABITAT USE AND LIFE HISTORY OF THIS SPECIES, INCLUDING A LIST OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS, IS PROVIDED IN SPECIAL PROVISIONS.

EROSION CONTROL SUPERVISOR
IN ACCORDANCE WITH SPEC. 2573.3 THE CONTRACTOR WILL PROVIDE A CERTIFIED EROSION CONTROL SUPERVISOR IN GOOD STANDING WHO IS KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPS. THE EROSION CONTROL SUPERVISOR IS INCIDENTAL.
THE EROSION CONTROL SUPERVISOR WILL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA.

TIMING OF BMP INSTALLATION:
ALL DISTURBED, EXPOSED SOILS MUST BE STABILIZED IMMEDIATELY BY SEEDING AND MULCHING AND/OR RIPRAP WITH FILTER FABRIC IF THE SOILS ARE NOT TO BE WORKED WITHIN 24 HOURS (INCLUDING WEEKENDS AND HOLIDAYS).

A SITE PLAN DETAILING PROPOSED EROSION CONTROL AND SEDIMENT CONTROL MEASURES AND A SCHEDULE INDICATING STARTING AND COMPLETION TIMES FOR CONSTRUCTION OPERATIONS SHALL BY SUBMITTED TO MN/DOT BY THE CONTRACTOR IN ACCORDANCE WITH MN/DOT SPEC 1717.2E. THE CONTRACTOR SHALL NOT START WORK UNTIL THE SCHEDULE AND SITE PLAN HAVE BEEN ACCEPTED BY MN/DOT.

EROSION CONTROL MEASURES:
THE CONTRACTOR IS RESPONSIBLE FOR MINIMIZING SOIL EROSION AND PREVENTING DAMAGE TO MILLE LACS LAKE FROM SEDIMENTATION OVER THE VARIOUS STAGES OF CONSTRUCTION AT ALL SEASONAL TIMES DURING THE YEAR FOR THE DURATION OF THE CONTRACT.

THE CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL DEVICES FOR STOCKPILE AREAS (INCIDENTAL).

TURF, CONVEYANCE, AND LAKE BOTTOM OUTFALLS MUST BE PROTECTED FROM CEMENTITIOUS MATERIALS, SEDIMENTS, AND CHEMICAL CLEANING AGENTS BY AVOIDANCE, USE OF PLASTIC SHEETING, COMPOST FILTER LOGS OR OTHER PROJECT ENGINEER APPROVED METHODS. THE CONTRACTOR SHALL PREVENT DISCHARGE TO SURFACE AND GROUND WATERS BY VACUUM OR SWEEP COLLECTION OF ALL CEMENTITIOUS MATERIALS, CLEANING AGENTS FROM PLASTIC GROUND COVERS, MATS, OR OTHER PROJECT ENGINEER APPROVED METHOD.

ANY RUTS OR DAMAGED TURF THAT COULD CREATE SEDIMENT DISCHARGE TO LAKE MILLE LACS AND CONVEYANCE SYSTEMS MUST BE REPAIRED WITHIN 24 HOURS WITH SHAPING, SEEDING AND CERTIFIED WEED FREE STRAW MULCH MATERIALS. EFFORT MUST BE MADE TO PREVENT REOCCURRENCE OF SOIL DISTURBANCE BY PROTECTIVE SOIL COVERS.

TEMPORARY SHORT TERM WORK GENERATING CONCRETE, MORTAR, OR STONE DEBRIS MAY USE GEOTEXTILE INLET FILTER STOPS, BUT MUST BE REPLACED WITH CURB AND GUTTER INLET SACKS WITH EMERGENCY OVERFLOW WILL BE USED, AS NEEDED, TO PROTECT INLETS AND LAKE MILLE LACS OVER THE LIFE OF THE CONTRACT WHEN EXPOSED SOILS WITH THE POTENTIAL TO DISCHARGE ARE UPGRADIENT TO THE INLET, OR DURING ACCESS AND TRACK-OUT OPERATIONS. PICKUP (ENCLOSED SKIDSTEER BROOM) SWEEPING OF ALL PAVED SURFACES WILL BE REQUIRED, AS NECESSARY TO KEEP SEDIMENTS, MUD, DIRT, ROCK, OR OTHER MATERIALS FROM LEAVING THE PAVED SURFACE DUE TO RAIN OR VEHICLE TRACKING.

CULVERT ENDS WILL BE PROTECTED FROM SEDIMENT DISCHARGE USING COMPOST FILTER LOGS, WOOD-FIBER LOGS, OR WOOD CHIP LOGS, AS NEEDED.

SLOPED GRADES MUST BE PROTECTED. ANY SOIL DISTURBED AREAS SHALL BE KEPT IN A PERPETUALLY STABILIZED CONDITION.

SOFT SOIL CROSSING WILL REQUIRE DRIVABLE MATS CAPABLE OF MINIMIZING SOIL DISTURBANCE FOR THE CONTRACTORS' EQUIPMENT. THIS MAY BE ACCOMPLISHED BY USE OF PLYWOOD, MUD MATS, OR STRUCTURAL PLASTIC BASE UNITS.

ALL PERIMETER CONTROL BMPS SHALL BE KEPT IN A FUNCTIONAL CONDITION, REGARDLESS OF NUMBER OF MOVEMENTS TO ACCOMMODATE THE CONTRACTORS OPERATIONS. PERIMETER CONTROL SHALL BE IN THE FORM OF 3987 FILTER LOGS, TYPE COMPOST LOG.

ALL TRASH AND CONSTRUCTION DEBRIS SHALL BE PICKED UP AT THE END OF EACH DAY AND PLACED IN DUMPSTER OR OTHER SUITABLE CONTAINERS, AND REMOVED AS NECESSARY TO REMAIN FUNCTIONAL.

FERTILIZER SHALL BE PHOSPHOROUS FREE AND BE INCORPORATED INTO THE TILLING AND PREP OPERATION BEFORE SOD IS INSTALLED.

TEMPORARY SEDIMENT CONTROL MEASURES:
SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT ENTERING MILLE LACS LAKE. SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN-GRADIENT PERIMETERS BEFORE ANY UP-GRADIENT LAND DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED.

THE CONTRACTOR SHALL USE A TEMPORARY ROCK CONSTRUCTION PAD OR OTHER APPROPRIATE BMPS AT MAJOR VEHICLE EXIT LOCATIONS TO MINIMIZE VEHICLE TRACKING OF SEDIMENT FROM THE PROJECT ONTO PAVED SURFACES. BMPS TO PROTECT VEHICLE EXIT SITES SHALL BE PAID FOR AS TEMPORARY ROCK CONSTRUCTION ENTRANCE. THE CONTRACTOR IS RESPONSIBLE FOR INSURING PAVED STREETS ARE CLEAN AT THE END OF EACH WORKING DAY. TRACKED SEDIMENT ON PAVED STREETS MUST BE REMOVED BY STREET SWEEPING WITHIN 24 HOURS OF DISCOVERY. STREET SWEEPING SHALL BE INCIDENTAL.

TEMPORARY SOIL STOCKPILES, IF REQUIRED, MUST HAVE EFFECTIVE SEDIMENT CONTROLS AROUND THE PERIMETER AND CANNOT BE PLACED IN SURFACE WATERS, INCLUDING STORM WATER CONVEYANCES SUCH AS CURB OR GUTTER SYSTEMS OR DITCHES. SEDIMENT CONTROLS FOR SOIL STOCKPILES SHALL BE INCIDENTAL.

OTHER MATERIAL STOCKPILES THAT WILL REMAIN ON SITE SHALL BE COVERED BY PLASTIC SHEETING AT THE END OF EVERY WORK DAY.

POLLUTION PREVENTION:
HAZARDOUS MATERIALS SUCH AS OIL AND FUEL MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT, TO PREV1ENT SPILLS, LEAKS, OR OTHER DISCHARGE FROM ENTERING MILLE LACS LAKE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A SITE PLAN FOR REFUELING METHODS. REFUELING AREAS MUST BE ON LEVEL GRADE AND LOCATED AT LEAST 15 YARDS FROM MILLE LACS LAKE. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SUPPLIES OF ABSORBENT SPILL CLEAN-UP MATERIALS AND SPILL KITS IN FUELING AREAS AND ON MOBILE FUELING EQUIPMENT.

ALL CHEMICAL SPILLS SHALL BE IMMEDIATELY PICKED UP, INCLUDING FERTILIZERS AND PORTABLE URINALS. ALL SPILLED MATERIALS SHALL BE PROPERLY DISPOSED OF OR, IN THE CASE OF FERTILIZER, SPREAD ACCORDING TO MANUFACTURERS RECOMMENDATIONS FOR NPK, OR AS INDICATED IN THE TURF RESTORATION PLAN. THERE SHALL BE NO EQUIPMENT WASHING ON SITE UNLESS IN A PREAPPROVED BY THE PROJECT ENGINEER, AND IN A DESIGNATED SITE WITH TOTAL POLLUTION MANAGEMENT PROGRAM THAT PREVENTS AIR, LAND AND WATER POLLUTION.

ALL MORTAR AND CHEMICAL MIXING SAWING, AND CUTTING OPERATIONS SHALL HAVE SECONDARY CONTAINMENT TO PREVENT CEMENTITIOUS LIQUIDS, SOLIDS AND DUSTS FROM INFILTRATING INTO THE GROUND, LAKE MILLE LACS, OR TRANSPORT BY ANY MEANS TO THE GUTTER, SIDEWALK OR ROAD SURFACE.

ALL CONCRETE OR STONE SAW CUTTING SHALL BE PREVENTED FROM ENTERING STORM WATER CONVEYANCE SYSTEMS AND LAKE MILLE LACS BY USE OF 3897 FILTER LOG, TYPE COMPOST LOG, AND REPLACE AS OFTEN AS NECESSARY TO REMAIN FUNCTIONAL TO FILTER REMOVE FINE CEMENTITIOUS DISCHARGE.

FINAL STABILIZATION:
THE CONTRACTOR MUST ENSURE FINAL STABILIZATION OF ANY DISTURBED AREAS OF THE SITE. FINAL STABILIZATION SHALL INCLUDE A MINIMUM OF 70% VEGETATION ESTABLISHMENT (100% STABILIZED) ON ALL PERVIOUS AREAS DISTURBED.

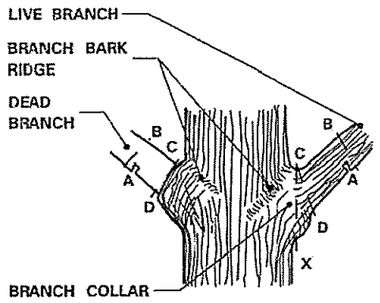
THE CONTRACTOR MUST ESTABLISH VEGETATIVE COVER OF DISTURBED AREAS BY SODDING OR BY SEEDING AND MULCHING IN ACCORDANCE WITH MN/DOT SPEC. 2575.3. PRIOR TO SODDING OR SEEDING, THE SOIL MUST BE PROPERLY LOOSENED TO A MINIMUM DEPTH Of 6 INCHES.

ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS MUST BE REMOVED AS PART OF THE FINAL STABILIZATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

DATE MODIFIED: AUGUST 23, 2012	DRAWN BY: TAG CHECKED BY: TAG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: [signature] PRINTED NAME: TODD GROVER DATE: AUGUST 23, 2012 LIC. NO. 43014	MacDONALD & MACK ARCHITECTS	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899
FILE SERVER LOCATION: M:\Projects\Garrison Concourse\Construction Documents\Garrison.dwg					

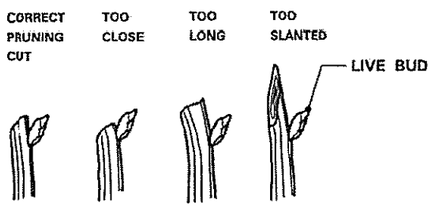
GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

STATE PROJECT 1804-87 (TH169) | SHEET NO. 4 OF 24 SHEETS



BRANCHES PRUNED AT TRUNK

(SHIGO METHOD)



BRANCHES PRUNED TO LIVE BUD

STEPS TO PRUNING WITH PRUNING SAW:

1. CUT PART WAY THROUGH THE BRANCH AT POINT A.
2. CUT COMPLETELY THROUGH BRANCH FROM POINT B TO A.
3. AT BRANCH COLLAR CUT FROM POINT C TO D.

INCORRECT CUT FROM POINT C TO X (TOO CLOSE) WILL RESULT IN DISCONTINUOUS CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

CORRECT CUT FROM POINT C TO D (LEAVING BRANCH COLLAR BUT NOT THE STUB FROM POINT B TO A) WILL RESULT IN CONTINUOUS DOUGHNUT SHAPED CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

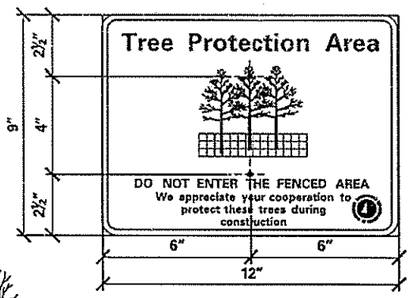
PRUNING NOTES:

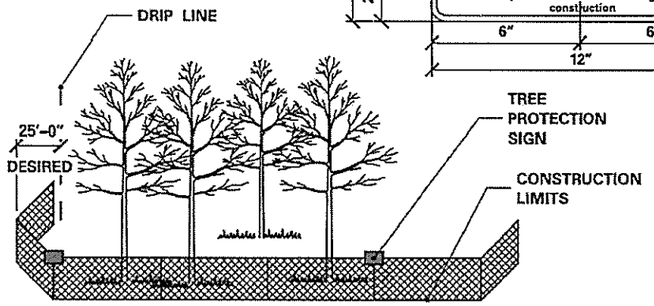
1. PRUNE USING CLEAN AND SHARP SCISSOR-TYPE PRUNER OR PRUNING SAW.
2. THE BEST TIME TO PRUNE IS LATE DORMANT SEASON OR EARLY SPRING.
3. AVOID PRUNING OAKS IN APRIL, MAY, JUNE OR JULY.
4. IF PRUNING IS NECESSARY OR IF WOUNDS OCCUR TO OAK TREES IN APRIL, MAY, JUNE OR JULY, IMMEDIATELY PAINT CUT SURFACE OR WOUND WITH LATEX PAINT OR SHELLAC.

PRUNING

(MnDOT 2571.3K2a9 and 2571.3E1)

1. FABRICATE 12" X 9" X 3⁄8" SIGN WITH 0.75" RADIUS CORNERS.
2. SIGN SHALL BE WHITE WITH BLACK LETTERING.
3. ATTACH SIGN TO POST USING 1" LENGTH WOOD SCREWS.

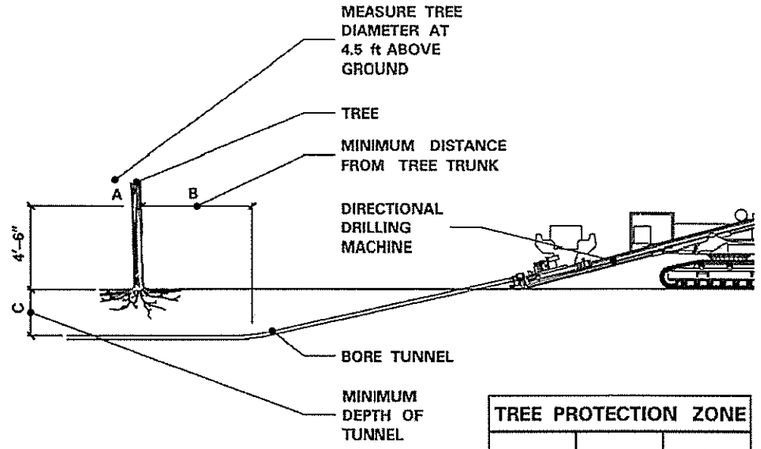




1. FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIPLINE OR CONSTRUCTION LIMITS AS SPECIFIED, PRIOR TO ANY CONSTRUCTION.
2. WHEN POSSIBLE PLACE FENCE 25 FEET BEYOND THE DRIP LINE.
3. PLACE TREE PROTECTION SIGNS ALONG FENCE AT 50' INTERVALS.

TEMPORARY FENCE

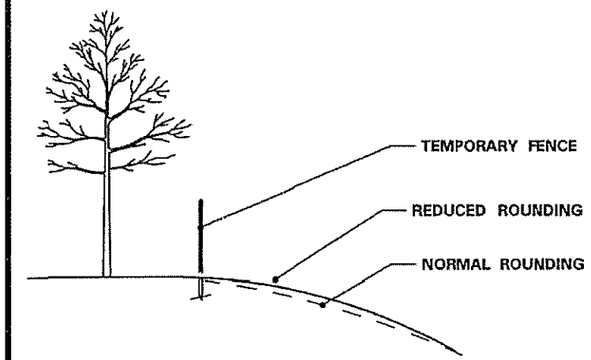
(MnDOT 2572.3A1)



TREE PROTECTION ZONE		
A	B	C
<2"	2'	2'
2–4"	4'	2.5'
>4–9"	6'	2.5'
>9–14"	10'	3'
>14–19"	12'	3.25'
>19"	15'	4'

UTILITY CONSTRUCTION

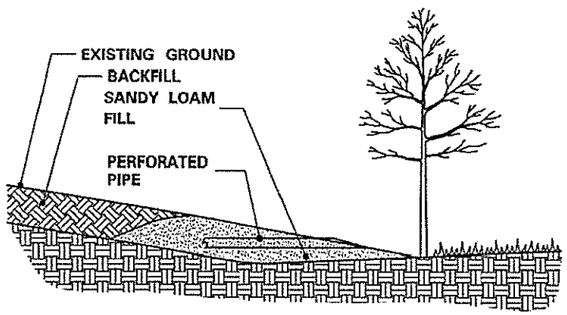
(MnDOT 2572.3A5)



SIGNIFICANT TREES NEAR THE PROPOSED CONSTRUCTION LIMITS WILL BE IDENTIFIED IN THE PLAN OR BY THE ENGINEER AND WILL BE PRESERVED BY THE CONTRACTOR.

1. PLACE THE TEMPORARY FENCE.
2. REDUCE SLOPE ROUNDING WHERE ROOT ZONES ARE DISTURBED BY NORMAL SLOPE ROUNDING.
3. VARY BACK SLOPE STEEPNESS TO AVOID TREE LOSS OR UNNECESSARY ROOT DAMAGE.

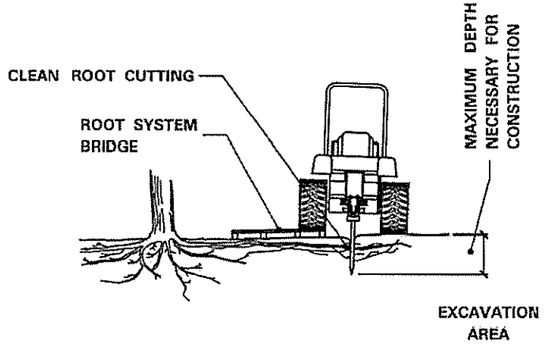
SLOPE ROUNDING



1. ANY FILL REQUIRED WITHIN THE DRIP LINE OF TREES, IS UNCOMPACTED SANDY LOAM TOPSOIL (WITH A COARSE SAND COMPONENT).
2. EXCESSIVE FILL MAY REQUIRE INSTALLING PERFORATED PIPE WITH AT LEAST ONE DAYLIGHTED END OPENING AS AN AERATION SYSTEM.

SANDY LOAM TOPSOIL

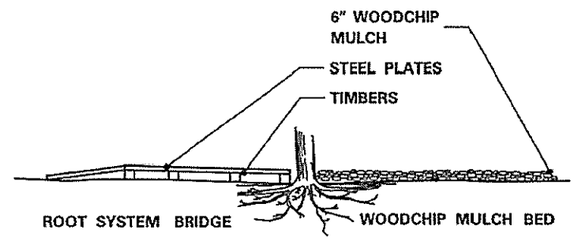
(MnDOT 2572.3A4)



1. WHEN DESIGNATED IN THE PLAN OR DIRECTED BY THE ENGINEER, PRIOR TO EXCAVATION, ALL TREE ROOTS WILL BE CLEANLY CUT BY A VIBRATORY PLOW OR OTHER APPROVED ROOT CUTTER.
2. THE TREE ROOTS WILL BE CUT CLEANLY TO THE MAXIMUM DEPTH NECESSARY FOR CONSTRUCTION.
3. IMMEDIALTLY, AND CLEANLY CUT DAMAGED AND EXPOSED ROOTS.
4. ROOT ENDS EXPOSED BY EXCAVATION ACTIVITIES SHALL BE IMMEDIATELY COVERED WITH A 6" LAYER OF ADJACENT SOIL.

CLEAN ROOT CUTTING

(MnDOT 2572.3A2)



IF CONSTRUCTION VEHICLES MUST PASS OVER ROOT ZONES, THE CONTRACTOR MUST EITHER:

1. CONSTRUCT ROOT SYSTEM BRIDGES WITH STEEL PLATE SUPPORTED ON WOOD TIMBERS PLACED RADIALLY TO THE TREE TRUNK.

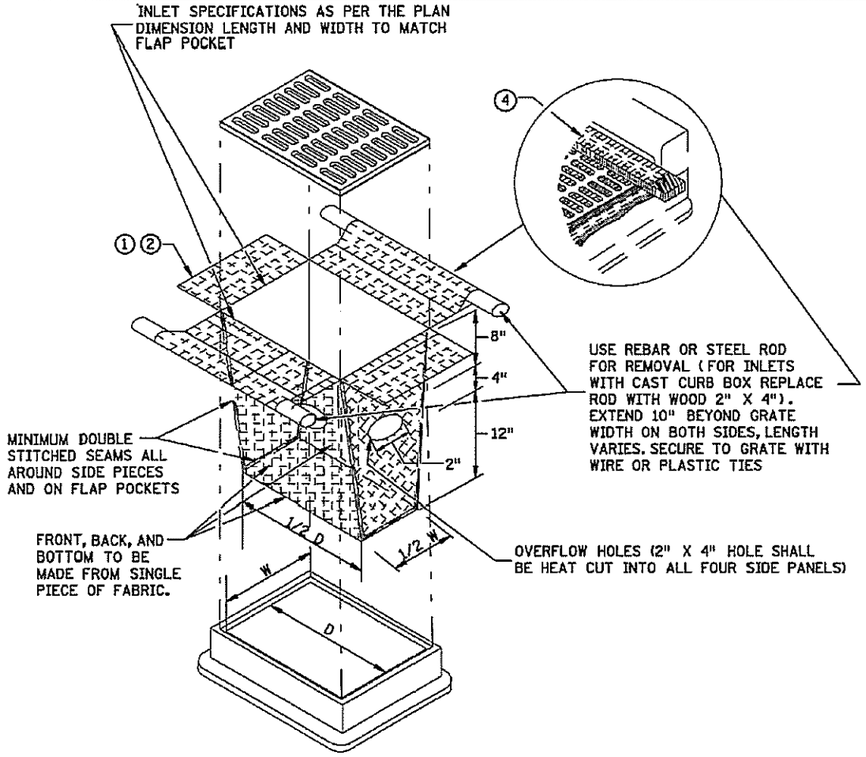
OR

2. PLACE A 6 INCH LAYER OF WOODCHIP MULCH OVER A TYPE III GEOTEXTILE (MnDOT 3733).

OTHER VEGETATION PROTECTION MEASURES

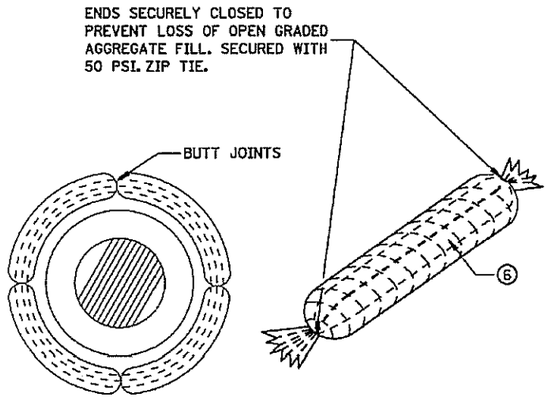
(MnDOT 2572.3A12)

DATE PRINTED: JANUARY / 01 / 2011		DRAWN BY OFFICE OF TECHNICAL SUPPORT	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION OFFICE OF TECHNICAL SUPPORT LANDSCAPE ARCHITECTURE UNIT TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155–1899	PROTECTION AND RESTORATION OF VEGETATION
				STATE PROJECT 1804–87 (TH 169) SHEET NO. 5 OF 24 SHEETS

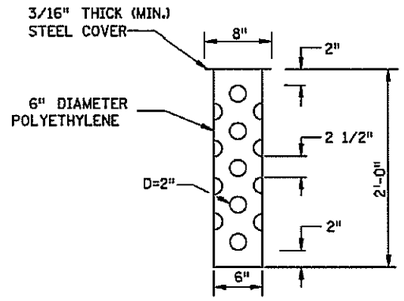


FILTER BAG INSERT ③

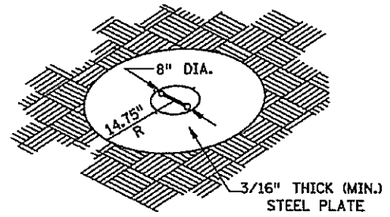
(CAN BE INSTALLED IN ANY INLET TYPE
WITH OR WITHOUT A CURB BOX)



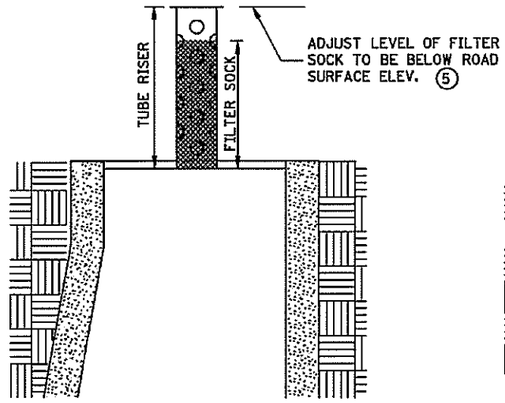
ROCK LOG/COMPOST LOG



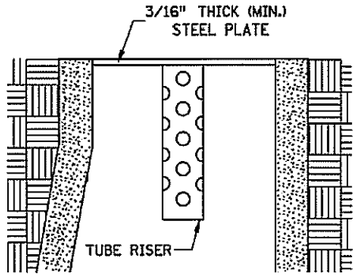
TUBE RISER



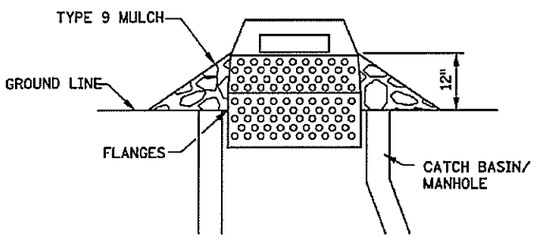
PERSPECTIVE VIEW



SECTION
(UP POSITION)

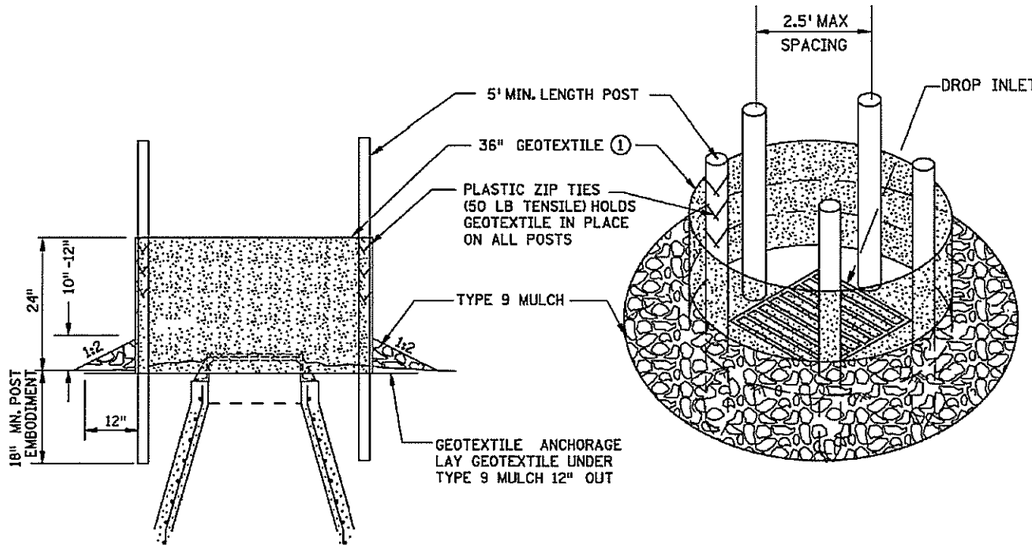


SECTION
(DOWN POSITION)



SEDIMENT CONTROL INLET HAT

NOTE:
THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.



SILT FENCE RING AND ROCK FILTER BERM

USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 or LESS

POP-UP HEAD

NOTES:
SEE SPECS. 2573, 3137, 3886 & 3891.

MANUFACTURED ALTERNATIVES LISTED ON Mn/DOT'S APPROVED PRODUCTS LIST MAY BE SUBSTITUTED.

① ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.

② FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

③ INSTALLATION NOTES:
DO NOT INSTALL FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3 INCHES BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCH SIDE CLEARANCE.

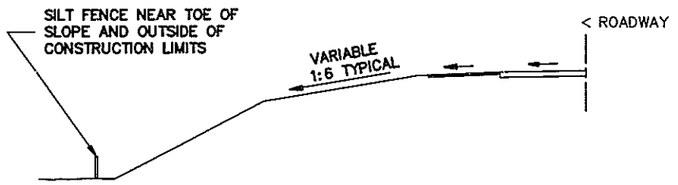
④ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.

⑤ SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.

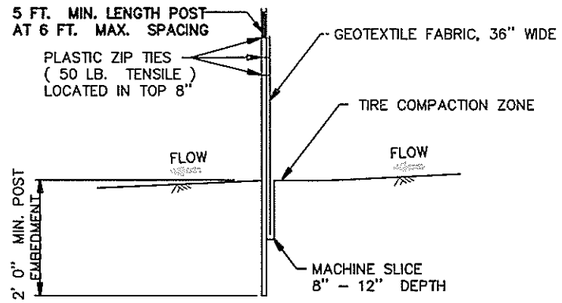
⑥ GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

STANDARD SHEET NO.	TITLE:
5-297.405 (4 OF 4)	TEMPORARY SEDIMENT CONTROL STORM DRAIN INLET PROTECTION
STANDARD APPROVED: MARCH 29, 2012	

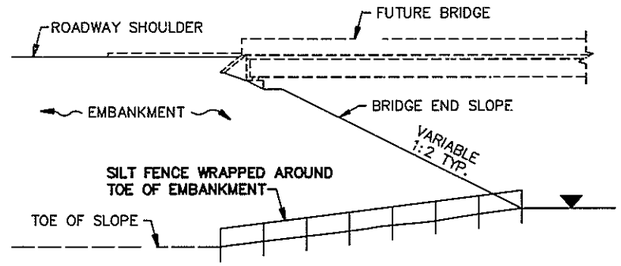
STATE PROJ. NO. 1804-87 (TH 169) SHEET NO. 6 OF 24 SHEETS



LOCATION OF SILT FENCE
AT TOE OF ROADWAY EMBANKMENT

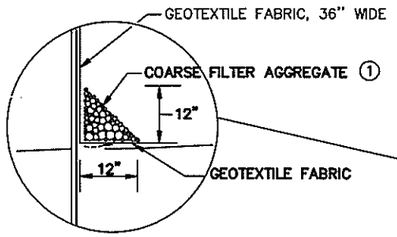


SILT FENCE, MACHINE SLICED
DESIGN GUIDELINES:
TO PROTECT AREAS FROM SHEET FLOW.
MAXIMUM CONTRIBUTING AREA: 1 ACRE.

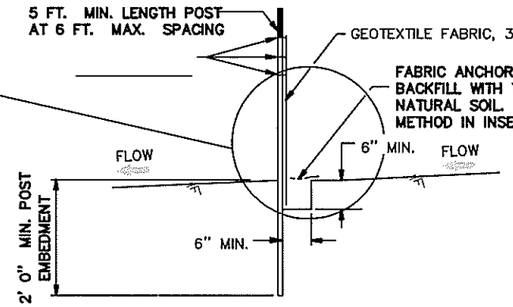


BRIDGE FILL

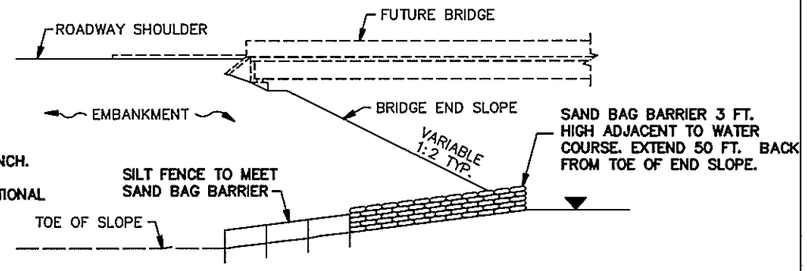
DESIGN GUIDELINES:
WATER COURSE FLOW VELOCITY: STAGNANT
CONTRIBUTING SLOPE AREA: 1/2 ACRE



OPTIONAL METHOD
FOR SILT FENCE, HEAVY DUTY

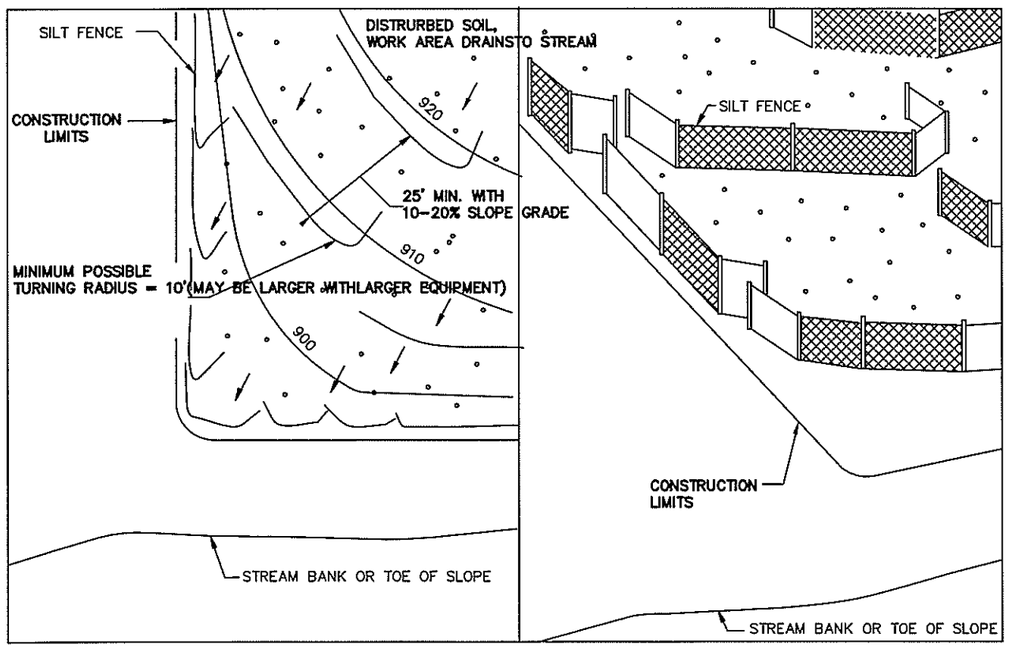


SILT FENCE, HEAVY DUTY
(HAND INSTALLED)
DESIGN GUIDELINES:
TO PROTECT AREAS FROM SHEET FLOW.
MAXIMUM CONTRIBUTING AREA: 1 ACRE.



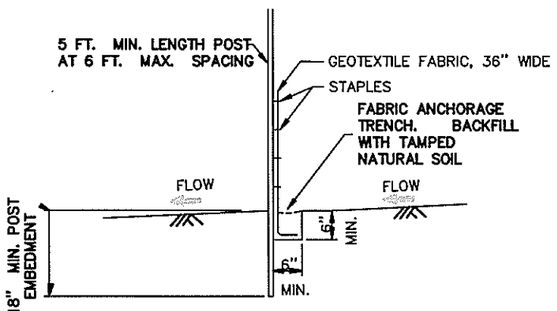
BRIDGE FILL

DESIGN GUIDELINES:
WATER COURSE FLOW VELOCITY: 1 TO 7 FT./SEC.
CONTRIBUTING SLOPE AREA: 1 ACRE

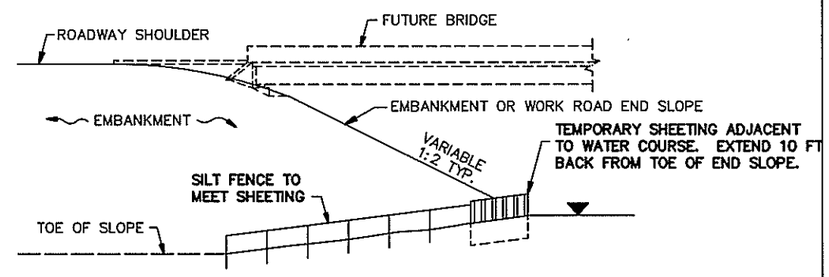


PLAN VIEW SIDE VIEW

SILT FENCE, J–HOOK INSTALLATION



SILT FENCE, PREASSEMBLED
DESIGN GUIDELINES:
TO PROTECT AREAS FROM SHEET FLOW.
MAXIMUM CONTRIBUTING AREA: 1 ACRE.



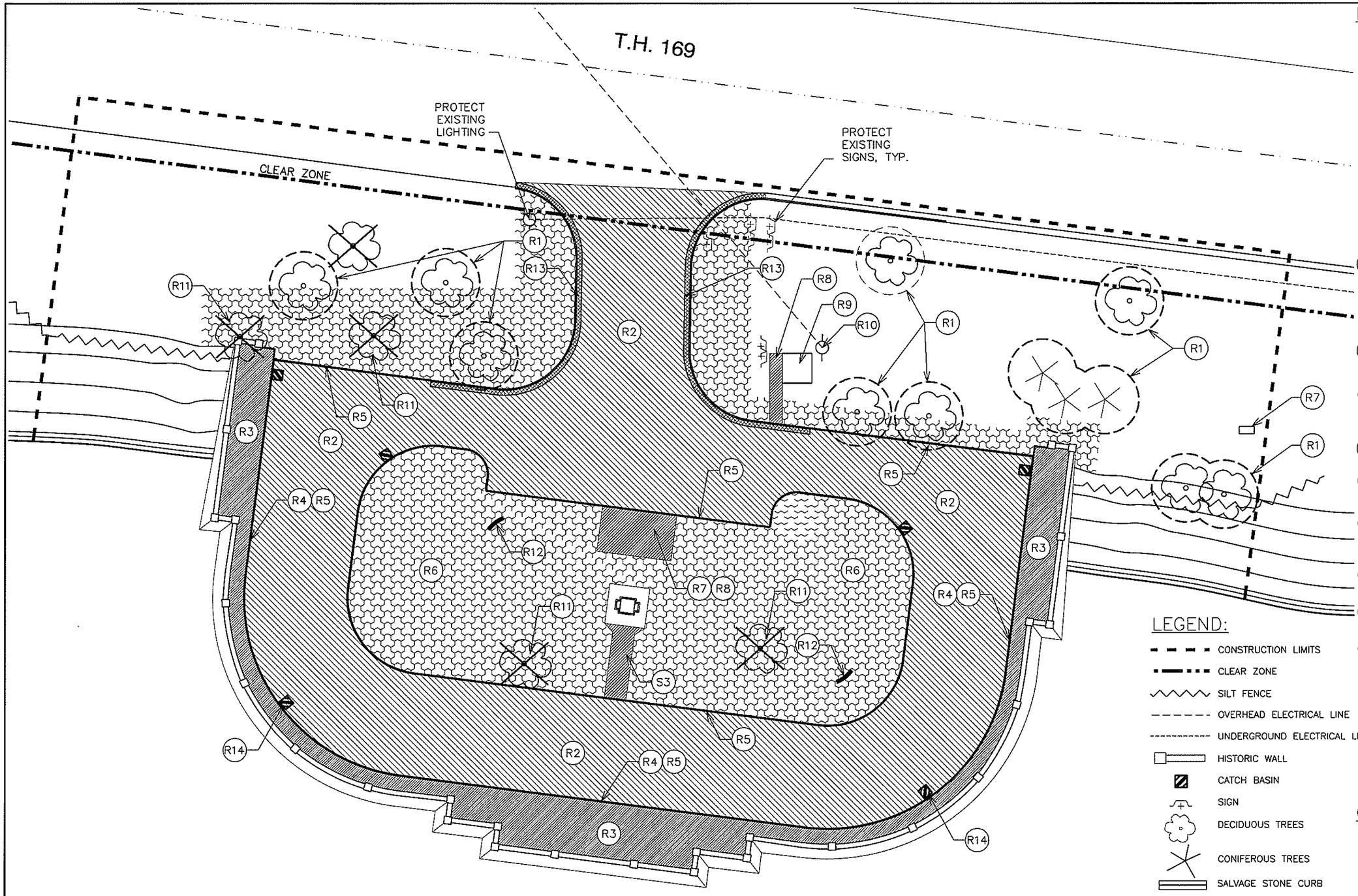
EMBANKMENT OR WORK ROAD FILL

DESIGN GUIDELINES:
WATER COURSE FLOW VELOCITY: 8 TO 15 FT./SEC.
CONTRIBUTING SLOPE AREA: 3 ACRES

SILT FENCE AT BRIDGE EMBANKMENT ADJACENT TO WATER

NOTES:
SEE SPECS. 2573, 3149 & 3886.
① COARSE FILTER AGGREGATE (SPEC. 3149) SHALL BE INCIDENTAL.

STANDARD SHEET NO. 5–297.408 (1 OF 2)	TITLE: TEMPORARY SEDIMENT CONTROL
STANDARD APPROVED: SEPTEMBER 27, 2006	SILT FENCE



PLAN

0 20 40 SCALE IN FEET

N

KEY NOTES:

R1 TREE PROTECTION: PROTECT TREES WITHIN CONSTRUCTION LIMITS. SEE SHEET 5.

R2 REMOVE BITUMINOUS PAVEMENT: REMOVE BITUMINOUS DRIVE.

R3 REMOVE CONCRETE WALK AND SALVAGE STONE PAVERS: REMOVE CONCRETE WALK. EXAMINE PAVERS BELOW – LABEL, DOCUMENT WITH PHOTOGRAPHS, DISMANTLE, AND SALVAGE FOR REINSTALLATION. DISPOSE OF DETERIORATED PAVERS. CLEAN MORTAR FROM PAVERS TO BE SALVAGED (INCIDENTAL).

R4 REMOVE CONCRETE WALK: REMOVE CONCRETE WALK OVER EXISTING STONE CURB.

R5 SALVAGE STONE CURB: LABEL, DOCUMENT WITH PHOTOGRAPHS, DISMANTLE, AND SALVAGE CURB FOR REINSTALLATION. DISPOSE OF DETERIORATED CURB. CLEAN MORTAR FROM CURB TO BE SALVAGED (INCIDENTAL).

R6 REMOVE SOD: REMOVE EXISTING SOD. SEE SHEET 11 FOR NEW GRADING AND SHEET 14 PLANTING REQUIREMENTS.

R7 RELOCATE MISCELLANEOUS STRUCTURES: REMOVE FIBERGLASS WALLEYE AND TAUER MONUMENT FOR SALVAGE AND REINSTALLATION IN NEW LOCATION.

R8 REMOVE CONCRETE WALK

R9 RELOCATE MISCELLANEOUS STRUCTURES: VISITORS CENTER AND SIGNAGE TO BE RELOCATED BY OTHERS.

R10 ELECTRICAL SERVICE: ELECTRICAL SERVICE AND POLE TO BE REMOVED BY OTHERS.

R11 CLEAR AND GRUB TREE

R12 RELOCATE BENCH: DISMANTLE, SALVAGE, AND REINSTALL STONE AND CONCRETE BENCH IN NEW LOCATION.

R13 REMOVE CONCRETE CURB

R14 ABANDON CATCH BASIN

LEGEND:

- CONSTRUCTION LIMITS
- CLEAR ZONE
- SILT FENCE
- OVERHEAD ELECTRICAL LINE
- UNDERGROUND ELECTRICAL LINE
- HISTORIC WALL
- CATCH BASIN
- SIGN
- DECIDUOUS TREES
- CONIFEROUS TREES
- SALVAGE STONE CURB
- REMOVE BITUMINOUS
- REMOVE CONCRETE WALK SALVAGE PAVERS
- REMOVE CONCRETE CURB
- REMOVE SOD

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. IMMEDIATELY REPORT UNFORESEEN CONDITIONS AND DISCREPANCIES TO ARCHITECT. NO ADDITIONAL WORK SHALL PROCEED UNTIL APPROVED BY ARCHITECT IN WRITING.
2. DO NOT SCALE DRAWINGS. USE PLAN INFORMATION, DIMENSIONS, DETAILS, SHOP DRAWINGS, AND FIELD VERIFICATION.
3. PLACE CB INLET PROTECTION PRIOR TO DEMOLITION AND ALL CONSTRUCTION. MAINTAIN THROUGHOUT CONSTRUCTION WORK.

DATE MODIFIED: AUGUST 23, 2012	DRAWN BY: TAG
	CHECKED BY: TAG
FILE SERVER LOCATION: M:\Projects\Garrison Concourse\Construction Documents\Garrison.dwg	

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: TR Grover

PRINTED NAME: TODD GROVER

DATE: AUGUST 23, 2012 LIC. NO. 43014

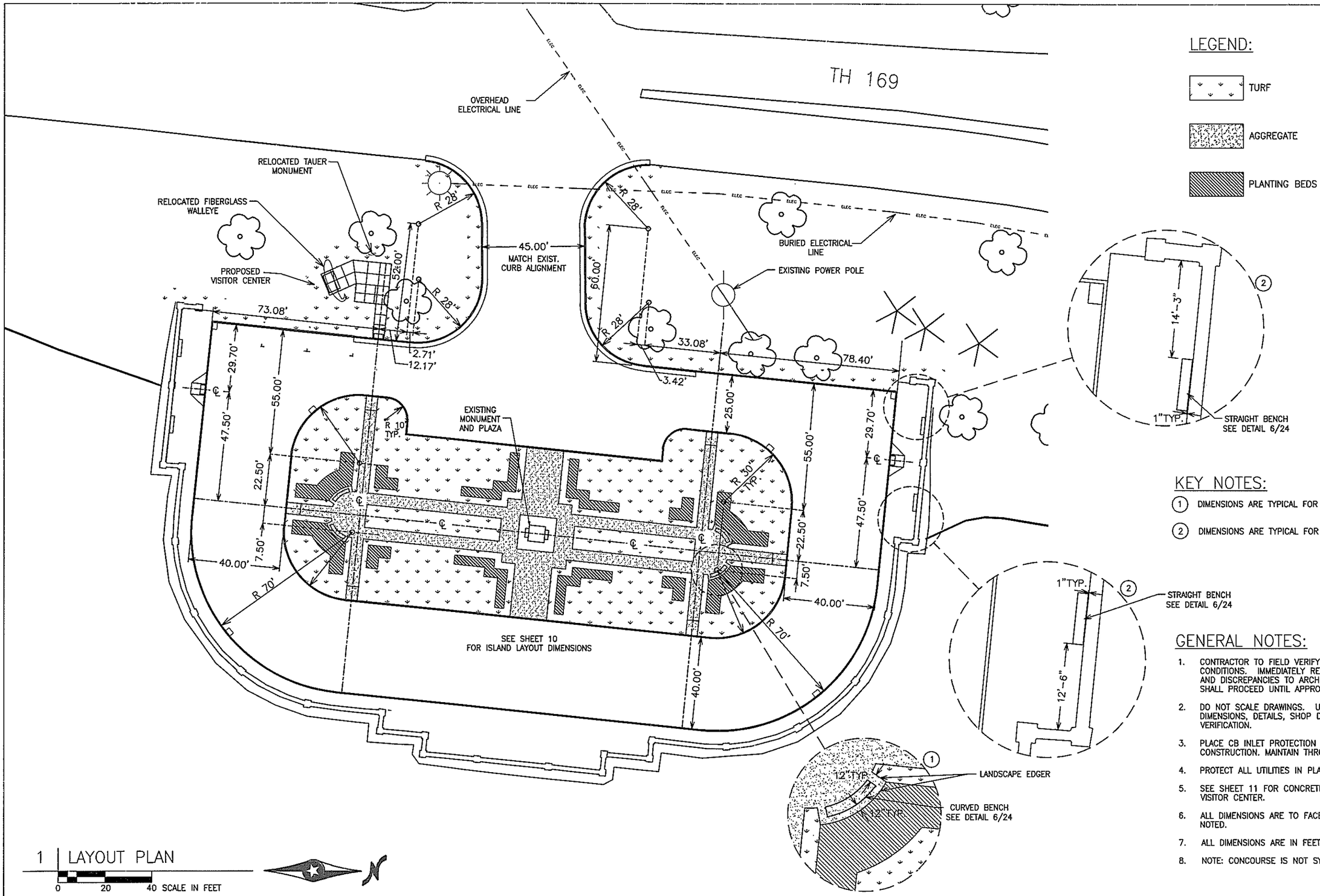
MacDONALD & MACK ARCHITECTS

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
REMOVALS PLAN

STATE PROJECT 1804-87 (TH169) | SHEET NO. 8 OF 24 SHEETS



LEGEND:

- TURF
- AGGREGATE
- PLANTING BEDS

KEY NOTES:

1. DIMENSIONS ARE TYPICAL FOR ALL FOUR CURVED BENCHES.
2. DIMENSIONS ARE TYPICAL FOR STRAIGHT BENCHES.

GENERAL NOTES:

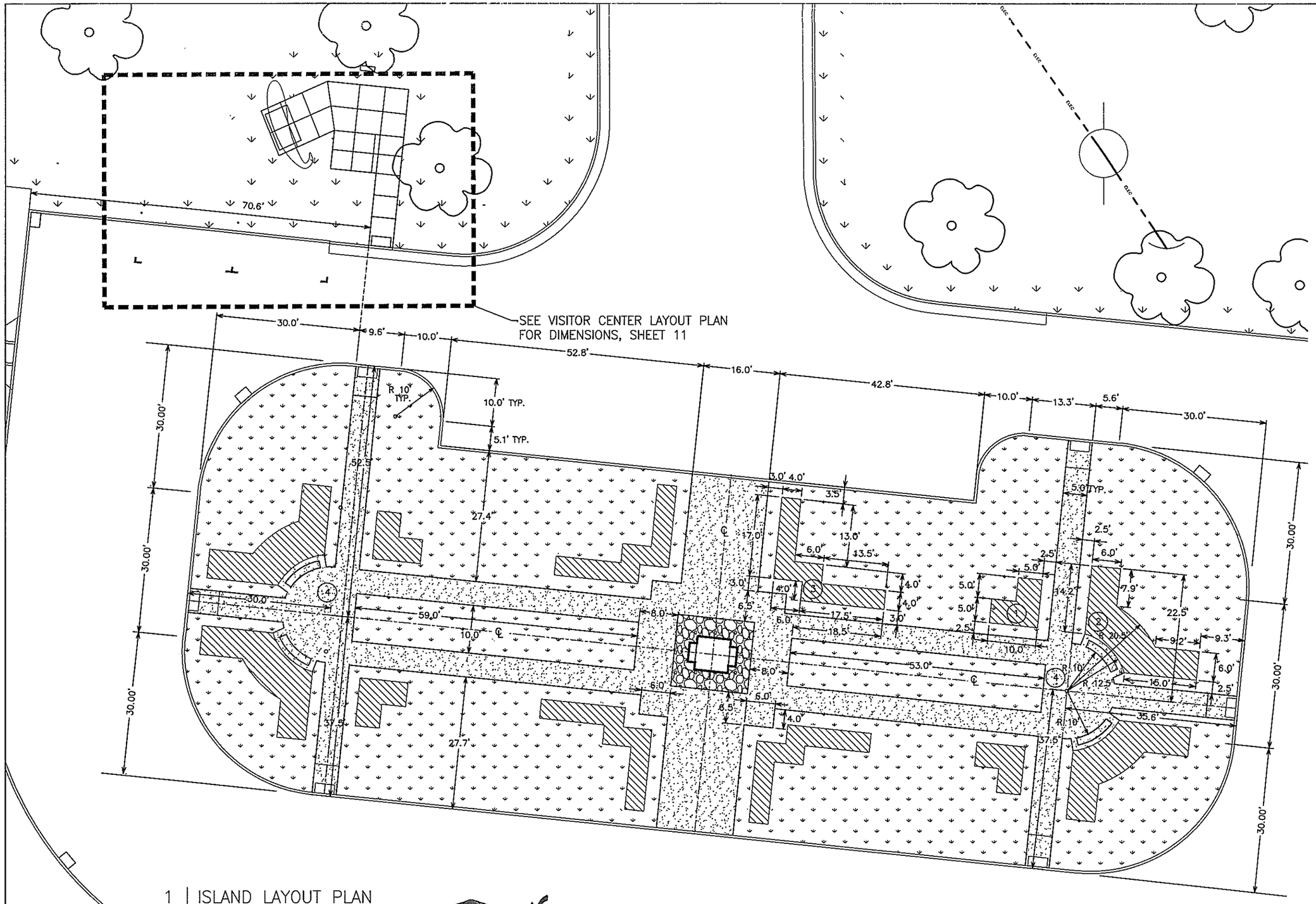
1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. IMMEDIATELY REPORT UNFORESEEN CONDITIONS AND DISCREPANCIES TO ARCHITECT. NO ADDITIONAL WORK SHALL PROCEED UNTIL APPROVED BY ARCHITECT IN WRITING.
2. DO NOT SCALE DRAWINGS. USE PLAN INFORMATION, DIMENSIONS, DETAILS, SHOP DRAWINGS, AND FIELD VERIFICATION.
3. PLACE CB INLET PROTECTION PRIOR TO DEMOLITION AND ALL CONSTRUCTION. MAINTAIN THROUGHOUT CONSTRUCTION WORK.
4. PROTECT ALL UTILITIES IN PLACE.
5. SEE SHEET 11 FOR CONCRETE WALK LAYOUT AT PROPOSED VISITOR CENTER.
6. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
7. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
8. NOTE: CONCOURSE IS NOT SYMMETRICAL.

1 LAYOUT PLAN

0 20 40 SCALE IN FEET

N

DATE MODIFIED: 09 SEPT 12	DRAWN BY: JJZ CHECKED BY: RLG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J MCFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON LAYOUT PLAN
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\orch\dwgs					STATE PROJECT 1804-87 (TH169) / SHEET NO. 9 OF 24 SHEETS



1 ISLAND LAYOUT PLAN

0 10 20 SCALE IN FEET

N

LEGEND:

- TURF
- AGGREGATE
- PLANTING BEDS
- FLAG STONE PLAZA

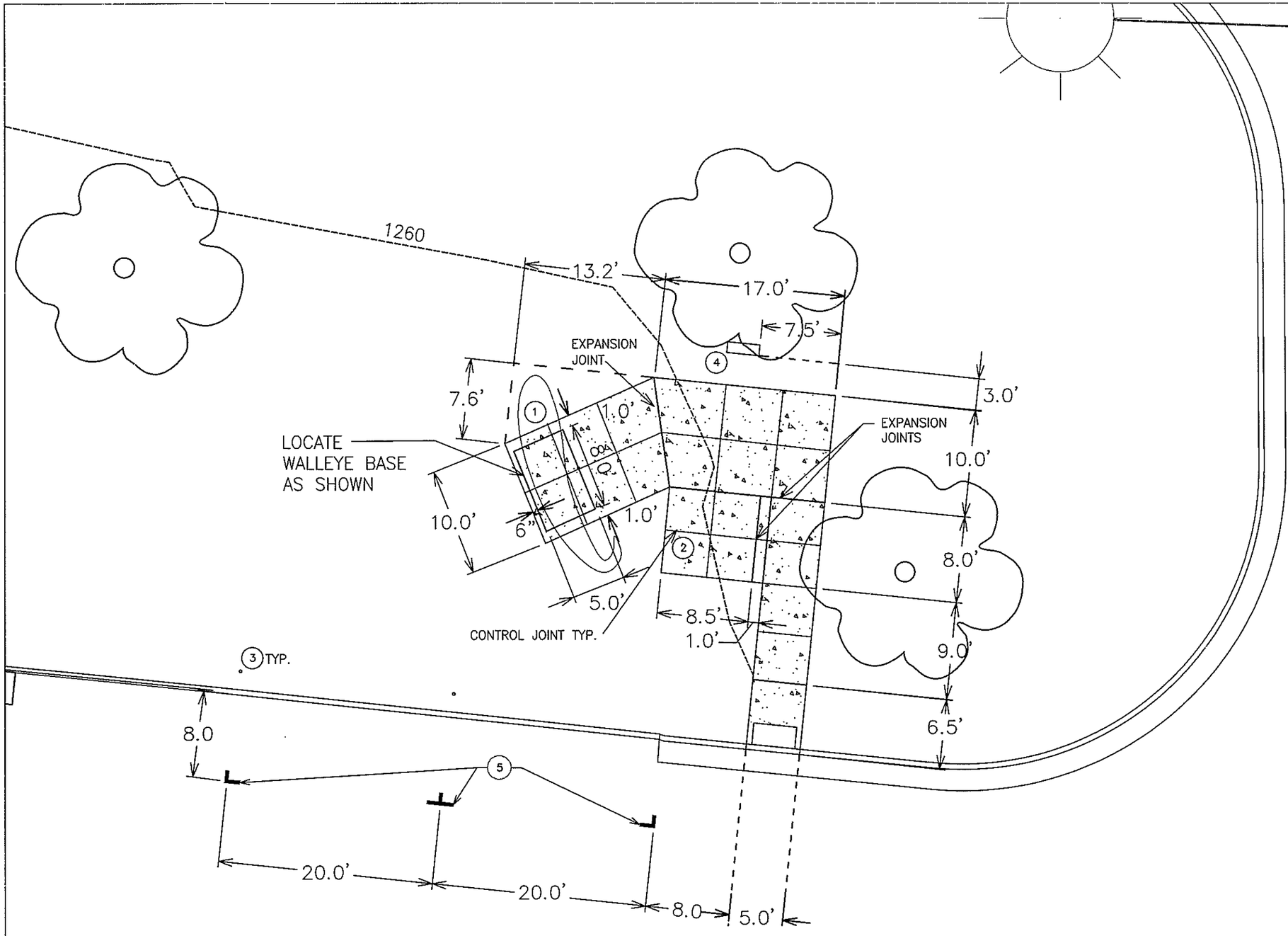
KEY NOTES:

1. MEASUREMENTS ARE TYPICAL OF ALL OTHER ISLANDS ON PLAN OF THIS SHAPE AND SIZE (4)
2. RADII AND MEASUREMENTS ARE TYPICAL OF ALL OTHER ISLANDS ON PLAN OF THIS SHAPE AND SIZE (4)
3. MEASUREMENTS ARE TYPICAL OF ALL OTHER ISLANDS ON PLAN OF THIS SHAPE AND SIZE (4)
4. MEASUREMENTS ARE TYPICAL FOR BOTH SEMICIRCLE PLAZA AREAS.
5. SEE SHEET 9 FOR DRIVE AND OTHER PLAN DIMENSIONS.

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. IMMEDIATELY REPORT UNFORESEEN CONDITIONS AND DISCREPANCIES TO ARCHITECT. NO ADDITIONAL WORK SHALL PROCEED UNTIL APPROVED BY ARCHITECT IN WRITING.
2. DO NOT SCALE DRAWINGS. USE PLAN INFORMATION, DIMENSIONS, DETAILS, SHOP DRAWINGS, AND FIELD VERIFICATION.
3. PLACE CB INLET PROTECTION PRIOR TO DEMOLITION AND ALL CONSTRUCTION. MAINTAIN THROUGHOUT CONSTRUCTION WORK.
4. PROTECT ALL UTILITIES IN PLACE IF NOT SCHEDULED FOR RELOCATION.
5. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. (BC= BACK OF CURB)
6. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
7. NOTE: CONCOURSE IS NOT SYMMETRICAL

DATE MODIFIED: 09 SEPT 12	DRAWN BY: JJZ CHECKED BY: RLG/KJM	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J. MCFADDEN DATE: SEPTEMBER 14, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON ISLAND LAYOUT PLAN
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\arch\dwgs					STATE PROJECT 1804-87 (TH169) | SHEET NO. 10 OF 24 SHEETS



1 | VISITOR CENTER LAYOUT PLAN

0 5 10 SCALE IN FEET

N

KEY NOTES:

1. FIBERGLASS WALLEYE, RELOCATED FROM ISLAND AREA.
2. PAD FOR RELOCATED VISITOR CENTER.
3. HANDICAPPED PARKING SIGNS (BY OTHERS)
4. TAUER MONUMENT, RELOCATED
5. INSTALL STRIPING FOR 2 HC PARKING SPACES, SEE DETAIL 3/22

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. IMMEDIATELY REPORT UNFORESEEN CONDITIONS AND DISCREPANCIES TO ARCHITECT. NO ADDITIONAL WORK SHALL PROCEED UNTIL APPROVED BY ARCHITECT IN WRITING.
2. DO NOT SCALE DRAWINGS. USE PLAN INFORMATION, DIMENSIONS, DETAILS, SHOP DRAWINGS, AND FIELD VERIFICATION.
3. PLACE CB INLET PROTECTION PRIOR TO DEMOLITION AND ALL CONSTRUCTION. MAINTAIN THROUGHOUT CONSTRUCTION WORK.
4. PROTECT ALL UTILITIES IN PLACE IF NOT SCHEDULED FOR RELOCATION.
5. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.

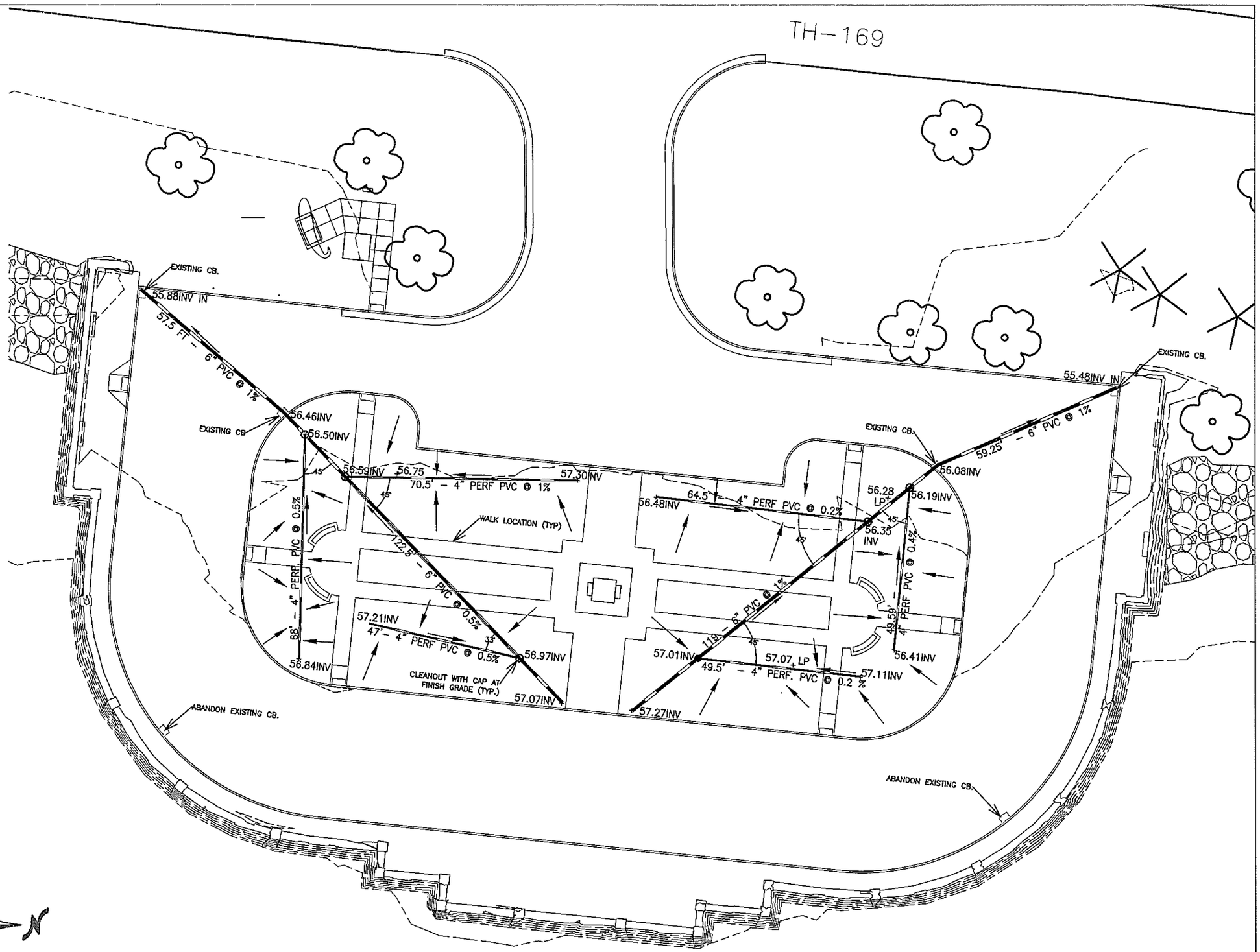
DATE MODIFIED: 12 SEPT 12	DRAWN BY: JJZ CHECKED BY: RLG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J MCFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155--1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON VISITOR CENTER LAYOUT PLAN
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\orch\dwgs					STATE PROJECT 1804–87 (TH169) | SHEET NO. 11 OF 24 SHEETS

NOTES:

1. SEE SUBSURFACE DRAINAGE DETAILS, SHEET 14.
2. ALL PIPE SHALL HAVE POSITIVE DRAINAGE; NO MINIMUM SLOPE.
3. TIE INTO EXISTING CATCH BASINS EXCEPT THOSE NOTED FOR ABANDONMENT.
4. PLACE 4 IN. PVC CLEANOUTS AT LOCATIONS INDICATED. CAP TO BE FLUSH WITH FINISH GRADE, AS INCONSPICUOUS AS POSSIBLE WHILE PROVIDING EASY ACCESS.
4. ANY ADJUSTMENT TO THE SUBSURFACE DRAINAGE PLAN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ADD 1200 TO ALL PROPOSED SPOT ELEVATIONS.

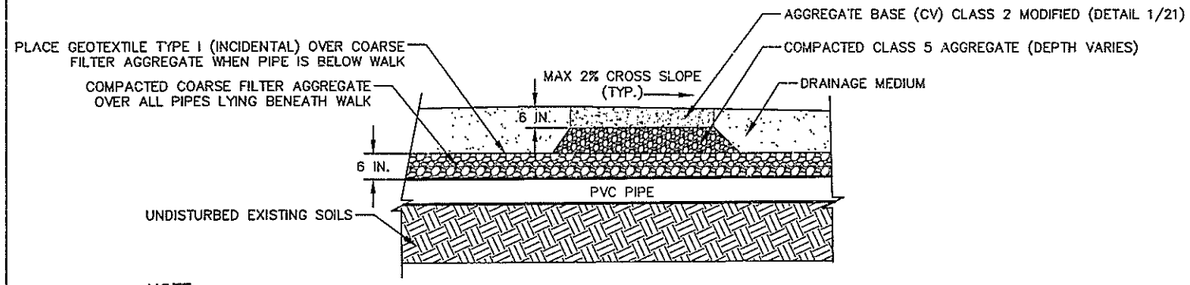
LEGEND:

- DIRECTION OF FLOW
- OBJECT/SPOT ELEV. LOCATION
- X.XXINV PROPOSED PIPE INVERT
- X.XX+ PROPOSED SPOT ELEVATION
- EXISTING CONTOUR
- O CLEANOUT PVC WITH CAP
- EXISTING RIPRAP



0 15 30 SCALE IN FEET

DATE MODIFIED: 9/12/2012	DRAWN BY: DH CHECKED BY: KJM	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J MCFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON SUBSURFACE DRAINAGE PLAN
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\orch\dwgs					STATE PROJECT 1804-87 (TH169) | SHEET NO. 13 OF 24 SHEETS

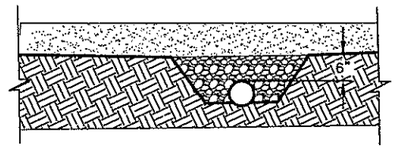


NOTE:
FURNISH AND INSTALL STABILIZED AGGREGATE WALKS PER 1/21. CONTAIN WALK AGGREGATE WITHIN CONFINES OF WALKS; DO NOT CONTAMINATE ADJOINING PIPES OR FINE FILTER AGGREGATE.

1 WALK SECTION
NOT TO SCALE

NOTE:

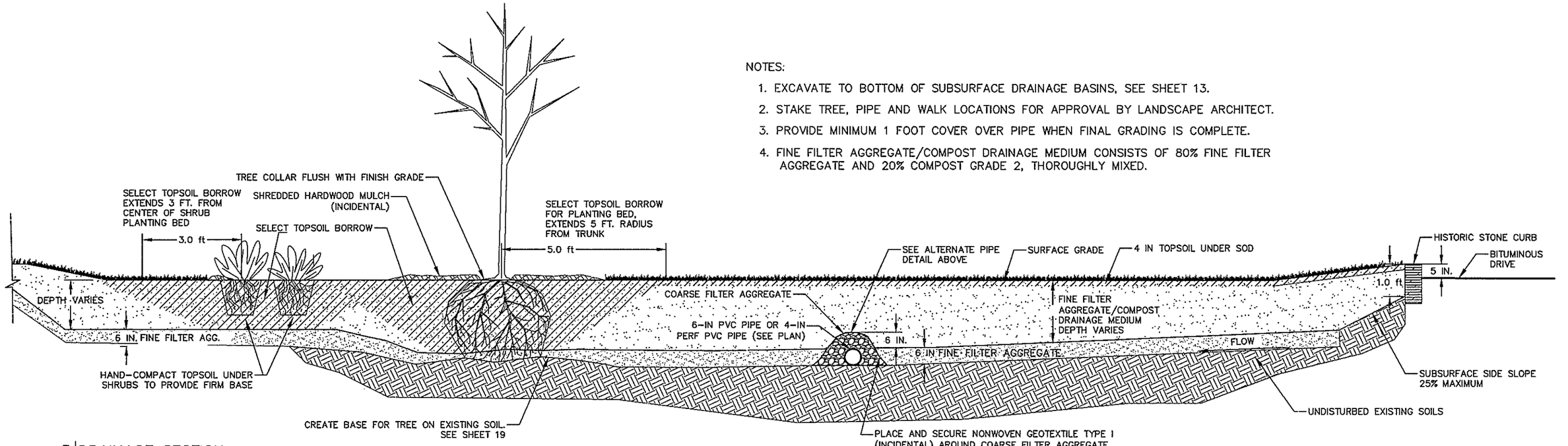
CREATE TRENCHES FOR PIPES AS NEEDED TO ACHIEVE PIPE SLOPES REQUIRED. PLACE 6 IN. COARSE FILTER AGGREGATE AND FOLLOW WITH 6 IN. FINE FILTER AGGREGATE LAYER, AS PER 3/14



2 ALTERNATE PIPE DETAIL
NOT TO SCALE

NOTES:

1. EXCAVATE TO BOTTOM OF SUBSURFACE DRAINAGE BASINS, SEE SHEET 13.
2. STAKE TREE, PIPE AND WALK LOCATIONS FOR APPROVAL BY LANDSCAPE ARCHITECT.
3. PROVIDE MINIMUM 1 FOOT COVER OVER PIPE WHEN FINAL GRADING IS COMPLETE.
4. FINE FILTER AGGREGATE/COMPOST DRAINAGE MEDIUM CONSISTS OF 80% FINE FILTER AGGREGATE AND 20% COMPOST GRADE 2, THOROUGHLY MIXED.



3 DRAINAGE SECTION
NOT TO SCALE

DATE MODIFIED: 9/12/12	DRAWN BY: DLH CHECKED BY: KJM	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J MCFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON SUBSURFACE DRAINAGE DETAILS
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\arch\dwgs					STATE PROJECT 1804-87 (TH169) SHEET NO. 14 OF 24 SHEETS

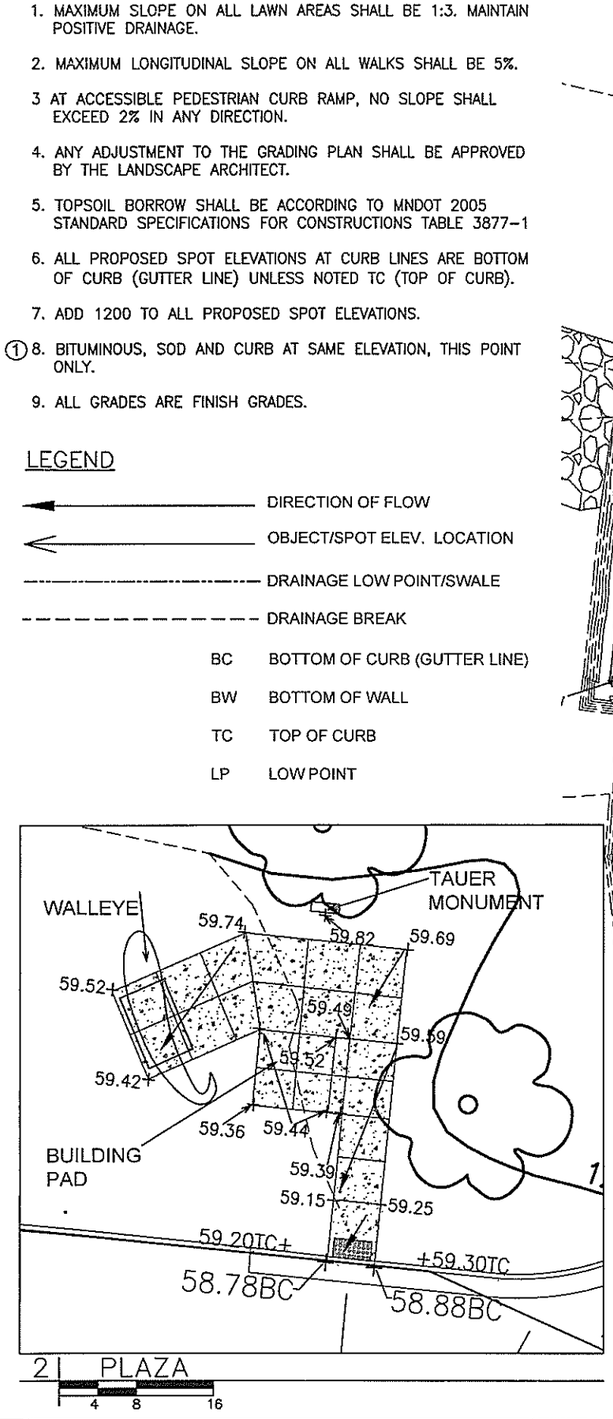
GRADING NOTES:

1. MAXIMUM SLOPE ON ALL LAWN AREAS SHALL BE 1:3. MAINTAIN POSITIVE DRAINAGE.
2. MAXIMUM LONGITUDINAL SLOPE ON ALL WALKS SHALL BE 5%.
3 AT ACCESSIBLE PEDESTRIAN CURB RAMP, NO SLOPE SHALL EXCEED 2% IN ANY DIRECTION.
4. ANY ADJUSTMENT TO THE GRADING PLAN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. TOPSOIL BORROW SHALL BE ACCORDING TO MNDOT 2005 STANDARD SPECIFICATIONS FOR CONSTRUCTIONS TABLE 3877-1
6. ALL PROPOSED SPOT ELEVATIONS AT CURB LINES ARE BOTTOM OF CURB (GUTTER LINE) UNLESS NOTED TC (TOP OF CURB).
7. ADD 1200 TO ALL PROPOSED SPOT ELEVATIONS.
(1) 8. BITUMINOUS, SOD AND CURB AT SAME ELEVATION, THIS POINT ONLY.
9. ALL GRADES ARE FINISH GRADES.

LEGEND

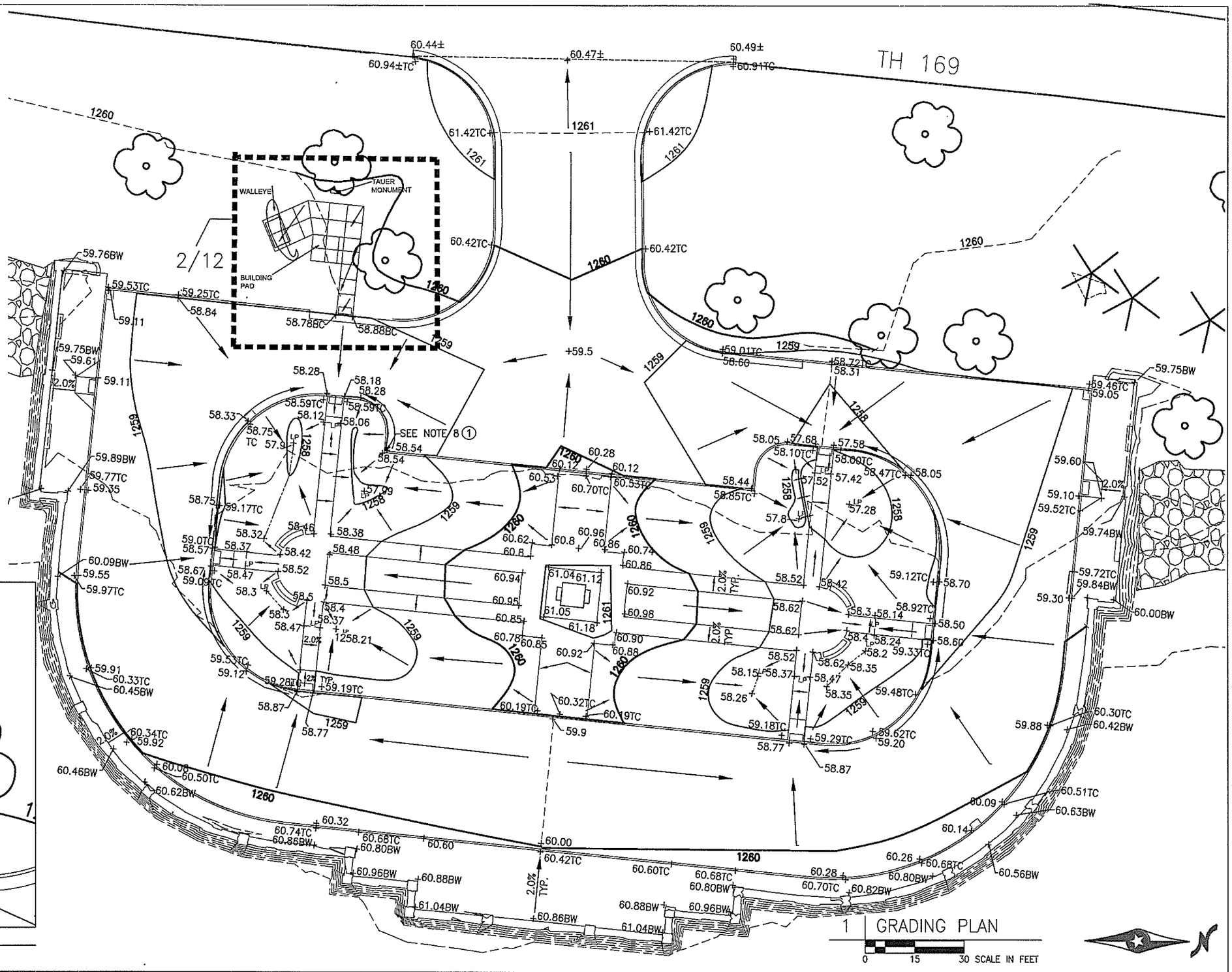
- DIRECTION OF FLOW
- OBJECT/SPOT ELEV. LOCATION
- DRAINAGE LOW POINT/SWALE
- DRAINAGE BREAK

BC	BOTTOM OF CURB (GUTTER LINE)
BW	BOTTOM OF WALL
TC	TOP OF CURB
LP	LOW POINT



2 | PLAZA

4 8 16



1 | GRADING PLAN

0 15 30 SCALE IN FEET

DATE MODIFIED: 9/12/12	DRAWN BY: KJM
	CHECKED BY: DH
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\arch\dwgs	

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

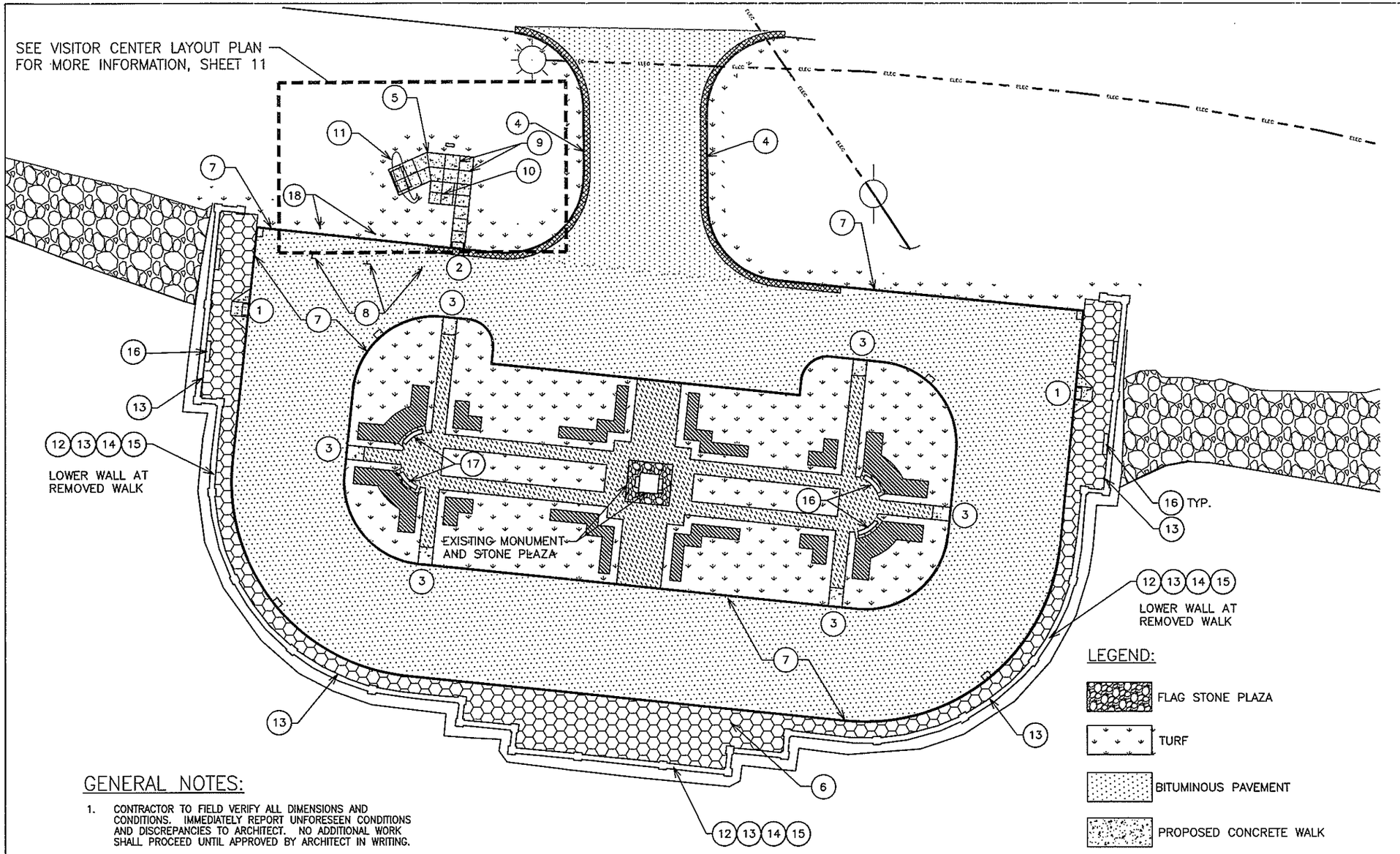
SIGNATURE: Kathryn J McFadden
PRINTED NAME: KATHRYN J MCFADDEN
DATE: SEPTEMBER 12, 2012 LIC. NO. 41742

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
SURFACE GRADING PLAN

STATE PROJECT 1804-87 (TH169) | SHEET NO. 15 OF 24 SHEETS



KEY NOTES:

1. SEE DETAIL 1/22
2. SEE DETAIL 2/22
3. SEE DETAIL 1/23
4. PLACE B624 CURB & GUTTER FROM END OF STONE CURB TO TH169 AS SHOWN.
5. 6" CONCRETE WALK
6. RESTORE HISTORIC SIDEWALK: PLACE SALVAGED AND NEW STONE PAVERS ON AGGREGATE BED. MORTAR JOINTS. SEE DETAIL 2/24.
7. RESTORE HISTORIC CURB: PLACE SALVAGED AND NEW STONE CURBING TO MATCH EXISTING. SEE DETAIL 3/24.
8. PLACE STRIPING FOR 2 HC PARKING SPACES, SEE DETAIL 3/22
9. CONTROL JOINT, TYP.
10. RELOCATE MISCELLANEOUS STRUCTURE: RELOCATION OF EXISTING VISITORS CENTER BY OTHERS.
11. RELOCATE MISCELLANEOUS STRUCTURE: RELOCATE FIBERGLASS WALLEYE TO NEW CONCRETE WALK. ATTACH USING EXISTING STRUCTURE AT WALLEYE BASE WITH NEW ANCHORS INTO NEW CONCRETE WALK.
12. CLEAN HISTORIC STRUCTURE: REMOVE DIRT AND CONCRETE RESIDUE FROM STRUCTURE PRIOR TO REPOINTING. PERFORM FINAL CLEANING AFTER STONE INSTALLATION AND REPOINTING.
13. PLACE EXPANSION JOINT DESIGN SPECIAL: PLACE EXPANSION JOINT BETWEEN PIER AND WALL, AND BETWEEN PAVERS AND WALL. SEE DETAILS 5/24 AND 2/24.
14. RESTORE HISTORIC WALL: PLACE NEW STONE IN AREAS OF DAMAGED STONE. NEW STONE TO MATCH HISTORIC IN TYPE, SIZE, ORIENTATION, COLOR, TEXTURE, AND TOOLING.
15. REPOINT HISTORIC STRUCTURE: AFTER REMOVAL OF CONCRETE WALK AND REMOVAL/SALVAGING OF HISTORIC PAVERS, REPOINT 100% OF WALL FROM CONCRETE WALK ELEVATION TO 1' FOOT BELOW HISTORIC PLAZA LEVEL. SEE DETAIL 4/24.
16. PLACE BENCH: PLACE CONCRETE AND STONE BENCH TO MATCH EXISTING ON SITE. SEE DETAIL 6/24.
17. RELOCATE BENCH: RELOCATE EXISTING CONCRETE AND STONE BENCHES ON SITE AND PLACE IN NEW LOCATION. SEE DETAIL 6/24 FOR SIMILAR INSTALLATION DETAILS.
18. HANDICAPPED PARKING SIGN: BY OTHERS.

LEGEND:

- FLAG STONE PLAZA
- TURF
- BITUMINOUS PAVEMENT
- PROPOSED CONCRETE WALK
- EXISTING RIPRAP
- SALVAGED FLAGSTONE WALK
- AGGREGATE WALK
- PLANTING BED
- STONE CURB
- NEW B624 CURB & GUTTER

GENERAL NOTES:

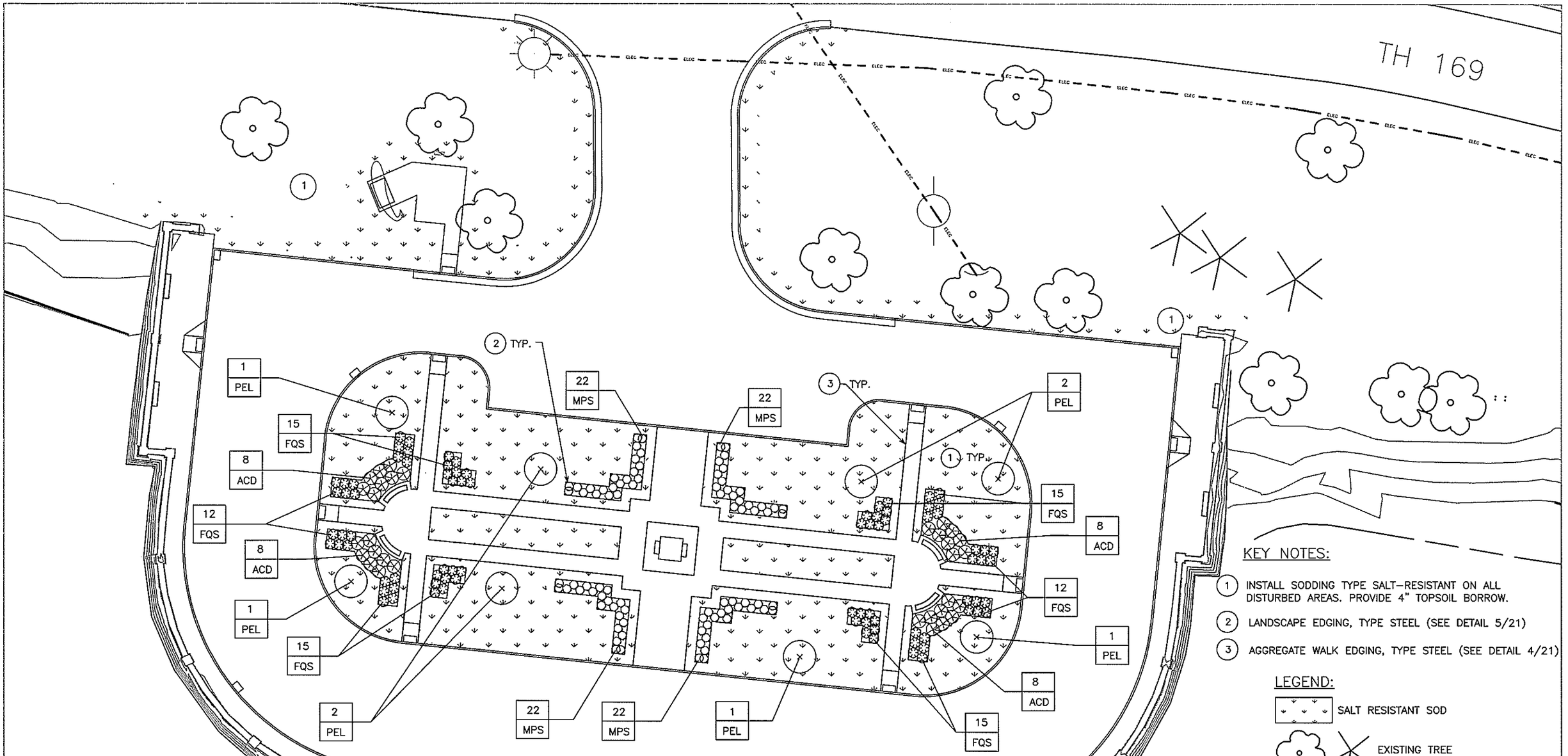
1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. IMMEDIATELY REPORT UNFORESEEN CONDITIONS AND DISCREPANCIES TO ARCHITECT. NO ADDITIONAL WORK SHALL PROCEED UNTIL APPROVED BY ARCHITECT IN WRITING.
2. DO NOT SCALE DRAWINGS. USE PLAN INFORMATION, DIMENSIONS, DETAILS, SHOP DRAWINGS, AND FIELD VERIFICATION.
3. PLACE CB INLET PROTECTION PRIOR TO DEMOLITION AND ALL CONSTRUCTION. MAINTAIN THROUGHOUT CONSTRUCTION WORK.
4. PROTECT ALL UTILITIES IN PLACE.

1 | CONSTRUCTION PLAN

0 20 40 SCALE IN FEET

N

DATE MODIFIED: 12 SEPT 2012	DRAWN BY: JJZ CHECKED BY: RLG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J. McFadden PRINTED NAME: KATHRYN J MCFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON CONSTRUCTION PLAN
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\arch\dwgs					STATE PROJECT 1804-87 (TH169) | SHEET NO. 16 OF 24 SHEETS



PLANT LIST

KEY	COMMON NAME	SCIENTIFIC NAME	SIZE	QTY.	SPACING
PEL	PRINCETON ELM	ULMUS AMERICANA 'PRINCETON'	2.5" B&B	8	PER PLAN
ACD	ALLEMAN'S COMPACT DOGWOOD	CORNUS SERICEA 'ALLEMAN'S COMPACT'	#5 CONT.	32	3.5' O.C.
FQS	FAIRY QUEEN SPIREA	SPIRAEA TRILOBATA 'FAIRY QUEEN'	#5 CONT.	84	2.5' O.C.
MPS	MARLEEN PINK SNOWBERRY	SYMPHORICARPOS X DOORENBOSII 'MARLEEN'	#5 CONT.	88	2.5' O.C.

1 PLANTING PLAN

0 15 30 SCALE IN FEET

N

KEY NOTES:

1. INSTALL SODDING TYPE SALT-RESISTANT ON ALL DISTURBED AREAS. PROVIDE 4" TOPSOIL BORROW.
2. LANDSCAPE EDGING, TYPE STEEL (SEE DETAIL 5/21)
3. AGGREGATE WALK EDGING, TYPE STEEL (SEE DETAIL 4/21)

LEGEND:

- SALT RESISTANT SOD
- EXISTING TREE
- PROPOSED TREE
- PROPOSED SHRUB

GENERAL NOTES:

1. PROVIDE 18" DEPTH SELECT TOPSOIL BORROW THROUGHOUT PLANTING BEDS.
2. PROVIDE WEED BARRIER UNDER MULCH IN SHRUB PLANTING AREAS. (INCIDENTAL)
3. PROVIDE 4" DEPTH SHREDDED HARDWOOD MULCH IN SHRUB PLANTING AREAS. (INCIDENTAL)
4. TOP OF SHREDDED HARDWOOD MULCH TO BE AT SAME ELEVATION AS TOP OF AGGREGATE WALK, ADJUST PLANTING SOIL ELEVATION ACCORDINGLY.

DATE MODIFIED: 12 SEPT 2012

DRAWN BY: JJZ

CHECKED BY: RLG

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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: Kathryn J McFadden

PRINTED NAME: KATHRYN J MCFADDEN

DATE: SEPTEMBER 12, 2012 LIC. NO. 41742

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON

PLANTING PLAN

STATE PROJECT 1804-87 (TH169)

SHEET NO. 17 OF 24 SHEETS

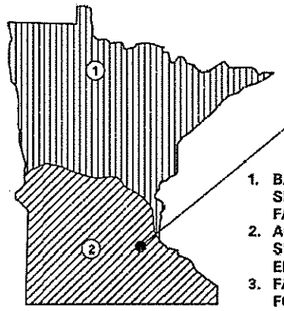
GENERAL NOTES

SEE SPECIAL PROVISIONS FOR SPECIFIC PROJECT REQUIREMENTS.	
REFER TO MnDOT SPECIFICATIONS 2571, 3861, AND THE "2010" INSPECTION AND CONTRACT ADMINISTRATION MANUAL FOR MnDOT LANDSCAPE PROJECTS" FOR GENERAL REQUIREMENTS.	
COMPLETE PREPARATORY WORK BEFORE STARTING INITIAL PLANTING OPERATIONS.	
ACCEPT ALL PLANT STOCK IN ACCORDANCE WITH (MnDOT 3861) PRIOR TO PLANTING.	
THE CONTRACTOR WILL DEMONSTRATE COMPETENCY FOR SOIL CULTIVATION OPERATIONS IN ACCORDANCE WITH (MnDOT 2571.3D2 STEP 4)	
THE CONTRACTOR WILL DEMONSTRATE COMPETENCY FOR ALL PLANT INSTALLATION OPERATIONS IN ACCORDANCE WITH (MnDOT 2571.3F1)	
RODENT PROTECTION	SEE SPECIAL PROVISIONS AND STANDARD PLANTING DETAILS (C)
FERTILIZER	SEE SPECIAL PROVISIONS
COMPOST	MnDOT 3890 GRADE 2 UNLESS OTHERWISE SPECIFIED.
MULCH MATERIAL	MnDOT 3882 TYPE 6 UNLESS OTHERWISE SPECIFIED.
MASS PLANTING BEDS	PREPARE MASS PLANTING BEDS FOR PLANTS PLACED AT 15' OR LESS, UNLESS OTHERWISE SPECIFIED ON SHEETS. PLANT BEDS IN STAGGERED ROWS ON THE PERIMETER FIRST, THEN UNIFORMLY FILL IN WITH REMAINING PLANTS. USE TRIANGULAR SPACING, UNLESS SPECIFIED OTHERWISE. PROVIDE 5' RADIUS CLEAR OF SHRUBS AROUND EACH DECIDUOUS TREE AND 8' CLEAR RADIUS AROUND EACH CONIFER TREE. RADIUS WILL BE MEASURED FROM THE CENTER OF THE TREE TO THE CENTER OF THE SHRUB. NOTIFY ENGINEER OF GROSS PLANT QUANTITY SURPLUS OR DEFICIENCY IMMEDIATELY. MULCH ENTIRE MASS PLANTING BED. SEE STANDARD PLANTING DETAILS (C)
TREE PAINTING (FROST CRACK PREVENTION)	PAINT OAK, LINDEN, LOCUST, MAPLE, CRABAPPLE AND MOUNTAIN ASH. ONLY UNDILUTED EXTERIOR WHITE LATEX PAINT IS ACCEPTABLE. PAINT TREE CIRCUMFERENCE FROM GROUND LINE TO FIRST MAJOR BRANCH.
PLANTING PLAN DIMENSIONS	STATED DIMENSIONS SUPERCEDE SCALING FROM PLAN.

WATERING GUIDELINES (MnDOT 2571.3G)

PLANT TYPE	AVERAGE GALLONS OF WATER PER APPLICATION
MACHINE TRANSPLANTED TREES	50–100
BALLED AND BURLAPPED TREES	20
BARE ROOT AND CONTAINER TREES	15
BALLED AND BURLAPPED SHRUBS	10
BARE ROOT AND CONTAINER SHRUBS	7
WOODY SEEDLINGS	4
PERENNIALS AND VINES	3

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR AND MAINTAIN SOIL MOISTURE AT ADEQUATE BUT NOT EXCESSIVE LEVELS. THE AMOUNTS LISTED ABOVE ARE GUIDELINES, NOT REQUIREMENTS.



PROJECT LOCATION

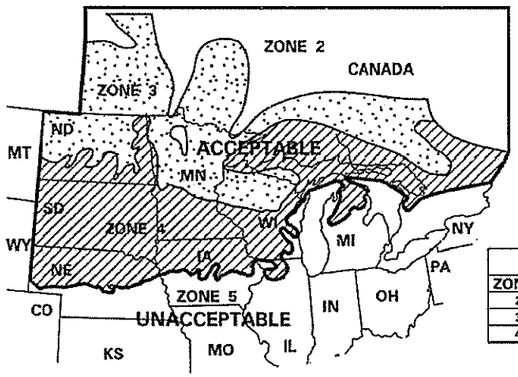
1. BARE ROOT PERENNIALS MUST BE INSTALLED IN THE SPRING NO LATER THAN JUNE 1ST OR FOLLOW THE FALL DECIDUOUS PLANTING DATES.
2. ACTUAL DATES MAY CHANGE DEPENDING UPON SEASONAL CONDITIONS, AS DETERMINED BY THE ENGINEER.
3. FALL PLANTING IS NOT ALLOWED FOR BARE ROOT FORM OF THE FOLLOWING SPECIES: HAWTHORN, DOGWOOD, POPLAR, HACKBERRY, LINDEN, IRONWOOD, HONEYLOCUST, BIRCH, MOUNTAIN ASH, MAPLE, WILLOW, CRABAPPLE, PLUM/CHERRY, OAKS, AND SUMAC.
4. ALL REPLACEMENT PLANTS MUST BE INSTALLED DURING THE MONTH OF MAY DURING THE FIRST YEAR OF THE PLANT ESTABLISHMENT PERIOD.

PLANTING DATES BY ZONE

KEY	SPRING				FALL	
	DECIDUOUS	CONIFEROUS	PERENNIALS	SEEDLINGS	DECIDUOUS	CONIFEROUS
1	APRIL 21 TO JUNE 1	APRIL 21 TO JUNE 1	MAY 1 TO JUNE 15	APRIL 21 TO JUNE 1	OCT. 1 TO NOV. 1	AUG. 25 TO SEPT. 15
2	APRIL 7 TO JUNE 1	APRIL 7 TO MAY 17	MAY 1 TO JUNE 15	APRIL 7 TO MAY 17	OCT. 10 TO NOV. 15	AUG. 25 TO SEPT. 15

PLANT INSTALLATION PERIOD

(MnDOT 2571.3F2)



ZONE MAP

ZONES	LEGEND	MIN. TEMP.
2		-40° TO -50° F
3		-30° TO -40° F
4		-20° TO -30° F

FOR ALL PLANT STOCK, DOCUMENT ACCEPTABILITY FOR HARDINESS IN THE MINNESOTA ZONE WHERE THE PROJECT SITE IS LOCATED, AS FOLLOWS:

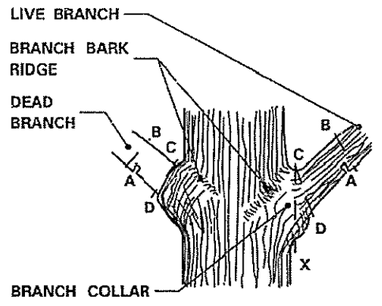
A. PLANT STOCK CONTINUOUSLY GROWN FOR AT LEAST THE LAST TWO YEARS WITHIN THE ACCEPTABLE LIMITS SHOWN.

OR

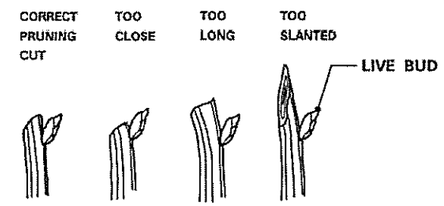
B. PLANT STOCK, GROWN OUTSIDE THE ACCEPTABLE GROWING RANGE LIMITS, HAVING SEED SOURCE OR ROOT AND GRAFT STOCK ORIGINATING FROM THE ACCEPTABLE LIMITS SHOWN.

ACCEPTABLE PLANT STOCK GROWING RANGE LIMITS

SOURCE: USDA PLANT HARDINESS ZONE MAP (MnDOT 3861.2C)



BRANCHES PRUNED AT TRUNK (SHIGO METHOD)



BRANCHES PRUNED TO LIVE BUD

STEPS TO PRUNING WITH PRUNING SAW:

1. CUT PART WAY THROUGH THE BRANCH AT POINT A.
2. CUT COMPLETELY THROUGH BRANCH FROM POINT B TO A.
3. AT BRANCH COLLAR CUT FROM POINT C TO D.

INCORRECT CUT FROM POINT C TO X (TOO CLOSE) WILL RESULT IN DISCONTINUOUS CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

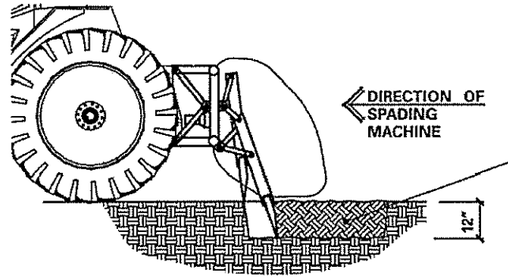
CORRECT CUT FROM POINT C TO D (LEAVING BRANCH COLLAR BUT NOT THE STUB FROM POINT B TO A) WILL RESULT IN CONTINUOUS DOUGHNUT SHAPED CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

PRUNING NOTES:

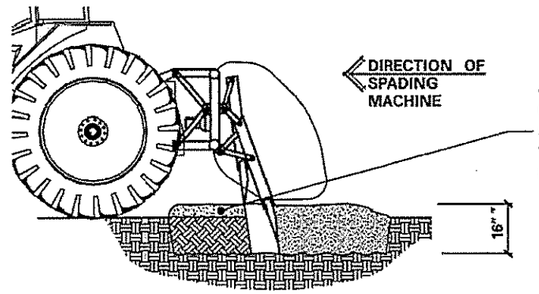
1. PRUNE USING CLEAN AND SHARP SCISSOR-TYPE PRUNER OR PRUNING SAW.
2. THE BEST TIME TO PRUNE IS LATE DORMANT SEASON OR EARLY SPRING.
3. AVOID PRUNING OAKS IN APRIL, MAY, JUNE OR JULY.
4. IF PRUNING IS NECESSARY OR IF WOUNDS OCCUR TO OAK TREES IN APRIL, MAY, JUNE OR JULY, IMMEDIATELY PAINT CUT SURFACE OR WOUND WITH LATEX PAINT OR SHELLAC.

PRUNING

(MnDOT 2571.3K2a9 and 2571.3E1)



PRIMARY TILLAGE – PASS 1



INCORPORATION TILLAGE – PASS 2

PLANTING SOIL

(MnDOT 2571.3D2)

DATE PRINTED: JANUARY / 01 / 2011		DRAWN BY OFFICE OF TECHNICAL SUPPORT	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION OFFICE OF TECHNICAL SUPPORT LANDSCAPE ARCHITECTURE UNIT TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899

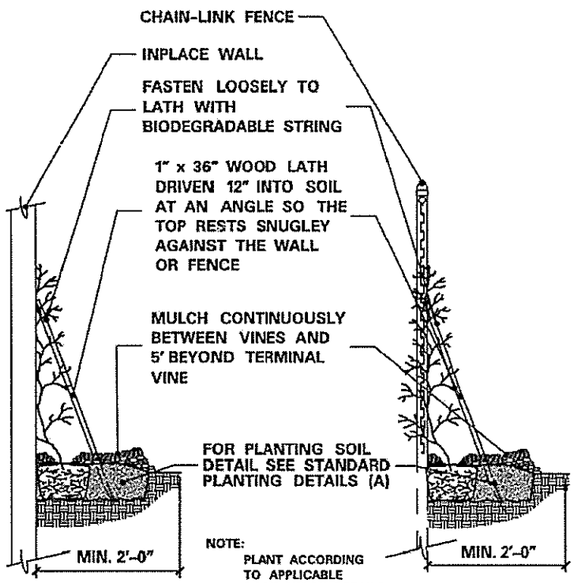
STANDARD PLANTING DETAILS (A)

STATE PROJECT 1804-87 (T.H. 169) SHEET NO. 18 OF 24 SHEETS

PLANTING HOLE DIMENSIONS

HOLE DEPTH FOR B&B AND CONTAINER PLANTS SHALL NOT EXCEED MEASUREMENT FROM ROOT FLAIR TO BOTTOM OF SOIL BALL.

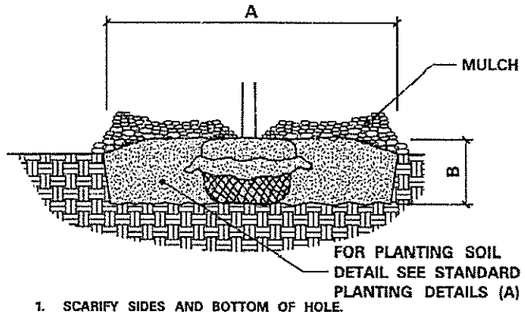
PLANT TYPE	PLANT SIZE UP TO AND INCLUDING	(A) MINIMUM HOLE WIDTH	(B) APPROXIMATE HOLE DEPTH
DECIDUOUS & ORNAMENTAL TREES	3' B.R.	46"	13"
	4' B.R	46"	14"
	5' B.R.	48"	14"
	6' B.R.	54"	15"
	7' B.R	60"	16"
	9' B.R.	66"	19"
	0.75" B.R.	48"	12"
	1" B.R.	54"	14"
	1.25" B.R.	60"	14"
	1.5 B.R.	66"	15"
	1.75" B.R	72"	16"
	2" B.R.	84"	19"
	4' B.B.	42"	11"
	5' B.B.	48"	12"
	6' B.B.	52"	14"
	8' B.B.	68"	16"
	10' B.B.	66"	16"
	12' B.B.	48"	16"
	1" B.B.	54"	14"
	1.25" B.B.	56"	15"
	1.5" B.B.	61"	15"
	1.75" B.B.	66"	16"
	2" B.B.	72"	16"
	2.5" B.B.	84"	19"
	3" B.B.	96"	20"
	3.5" B.B.	114"	23"
	4" B.B.	126"	25"
DECIDUOUS SHRUBS, ROSES AND PERENNIALS	12" B.R.	24"	7"
	15" B.R.	28"	8"
	18" B.R.	30"	8"
	2' B.R.	33"	9"
	3' B.R.	42"	11"
	4' B.B.	48"	12"
	5' B.R.	54"	14"
	6' B.R.	60"	14"
PERENNIAL HOLE DEPTH AND WIDTH SHALL BE BASED UPON ON-CENTER SPACING IN A CONTINUOUS TRENCH.	18" B.B.	27"	7"
	2' B.B.	30"	8"
	3' B.B.	36"	9"
	4' B.B.	42"	11"
	5' B.B.	48"	12"
	6' B.B.	54"	14"



WALL INSTALLATION

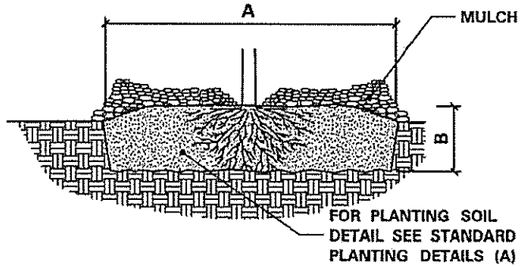
FENCE INSTALLATION

INSTALLATION OF VINES



1. SCARIFY SIDES AND BOTTOM OF HOLE.
2. PROCEED WITH CORRECTIVE PRUNING.
3. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE WITH BURLAP AND WIRE BASKET, (IF USED), INTACT.
4. SLIT REMAINING TREATED BURLAP AT 6" INTERVALS.
5. BACKFILL TO WITHIN APPROXIMATELY 12" OF THE TOP OF THE ROOTBALL, THEN WATER PLANT.
6. REMOVE THE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM THE TOP 1/3 OF THE BALL. REMOVE ALL TWINE. REMOVE OR CORRECT STEM GIRDLING ROOTS.
7. PLUMB AND BACKFILL WITH PLANTING SOIL.
8. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
9. BACK FILL VOIDS AND WATER A SECOND TIME.
10. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

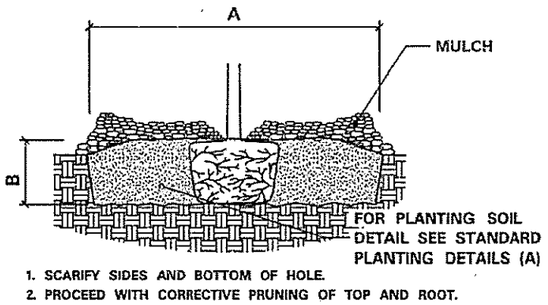
BALLED & BURLAPPED STOCK



1. SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
2. SCARIFY SIDES AND BOTTOM OF HOLE.
3. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND ROOTS.
4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACK FILL VOIDS AND WATER A SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

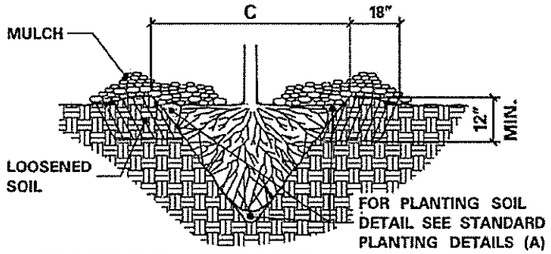
BARE ROOT STOCK

INSTALLATION OF PLANTS



1. SCARIFY SIDES AND BOTTOM OF HOLE.
2. PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
3. REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.
4. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE TOP OF THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE.
5. PLUMB AND BACKFILL WITH PLANTING SOIL.
6. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANT AND FILL VOIDS.
7. BACK FILL VOIDS AND WATER A SECOND TIME.
8. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

CONTAINER STOCK



1. SCARIFY SIDES AND BOTTOM OF HOLE.
2. PROCEED WITH CORRECTIVE PRUNING.
3. SET PLANT ON NATIVE SOIL AT SAME DEPTH AS IT WAS PREVIOUSLY GROWN.
4. PLUMB AND BACKFILL WITH PLANTING SOIL.
5. AFTER PLANTING, LOOSEN THE SOIL IMMEDIATELY ADJACENT TO THE ROOT BALL TO A MINIMUM DISTANCE OF 18" AND A MINIMUM DEPTH OF 12".
6. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANT AND FILL VOIDS.
7. BACK FILL VOIDS AND WATER A SECOND TIME.
8. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

MINIMUM TREE SPADE SIZE REQUIREMENTS

(C) SPADE DIAMETER SIZE	OAK TREE, CALIPER	DECIDUOUS/ ORNAMENTAL TREE,CALIPER	CONIFEROUS TREE, HEIGHT
42"	1" to 1.5"	2" to 3"	5' to 7'
60"	1.5" to 2.5"	3" to 4"	7' to 9'
78"	2.5" to 3.5"	4" to 6"	9' to 14'
85"	3.5" to 5"	6" to 8"	14' to 18'

MACHINE MOVED STOCK

PLANTING HOLE DIMENSIONS

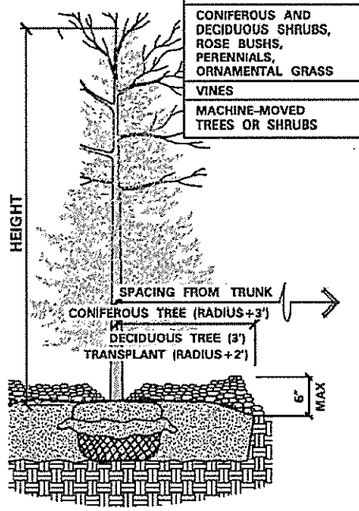
HOLE DEPTH FOR B&B AND CONTAINER PLANTS SHALL NOT EXCEED MEASUREMENT FROM ROOT FLAIR TO BOTTOM OF SOIL BALL.

PLANT TYPE	PLANT SIZE UP TO AND INCLUDING	(A) MINIMUM HOLE WIDTH	(B) APPROXIMATE HOLE DEPTH
CONIFEROUS TREES AT LEAST 2/3 OF ALL CONIFER BRANCHES WILL CONTAIN TERMINAL BUDS	2' B.B	36"	10"
	3' B.B	42"	11"
	4' B.B	51"	13"
	5' B.B	60"	13"
	6' B.B	66"	15"
	7' B.B	72"	16"
	8' B.B	81"	18"
	9' B.B	90"	20"
	10' B.B	102"	21"
	12' B.B	114"	24"
CONIFEROUS SHRUBS (UPRIGHT)	18" B.B.	24"	7"
	3' B.B.	48"	12"
CONIFEROUS SHRUBS (SPREADING)	18" SPR B.B.	30"	8"
	2' SPR B.B.	36"	9"
CONTAINER GROWN PLANTS	CELLPACKS / PLUGS	6"	2.5"
	2.25" CONT.	7"	3"
	3.5" CONT.	10"	3"
	4" CONT.	11"	4"
	4.5" CONT.	13"	4"
	6"/1 QT CONT.	15"	5.5"
	1# CONT.	16"	6"
	2# CONT.	23"	7.5"
	3# CONT.	28"	8.5"
	5# CONT.	30"	11"
	7# CONT.	37"	11"
	15# CONT.	44"	14"
	10# CONT.	45"	15"
	25# CONT.	60"	16"
	25# CONT.	72"	17"
SEEDLINGS	6" SEEDLING	15"	14"
	9" SEEDLING	18"	14"
	12" SEEDLING	23"	16"
	15" SEEDLING	30"	16"
	2' SEEDLING	36"	18"
VINES	1 YR. MED B.R.	15"	11"
	1 YR. NO. 1 B.R.	17"	14"
	2 YR. MED. B.R.	33"	12"
	2 YR. NO. 1 B.R.	42"	15"

MULCH AREA CALCULATOR

TYPE OF PLANT	SQ. FT. PER PLANT
CONIFEROUS TREES	$\left[\left(\frac{3/5 \times \text{HEIGHT}}{2}\right)+3\right]^2 \times \pi$
DECIDUOUS AND ORNAMENTAL TREES	$3^2 \times \pi$
CONIFEROUS AND DECIDUOUS SHRUBS, ROSE BUSHS, PERENNIALS, ORNAMENTAL GRASS	SPACING x SPACING
VINES	SPACING x 2
MACHINE-MOVED TREES OR SHRUBS	$\left[\left(\frac{\text{SPADE DIAMETER}}{2}\right)+1\right]^2 \times \pi$

π = 3.1416



1. PULL MULCH BACK NO LESS THAN 3" AND NO MORE THAN 6" FROM TREE TRUNKS.
2. SUBSIDING OR DETERIORATING MULCH IS ACCEPTABLE THROUGHOUT THE ESTABLISHED PERIOD IF THE MULCH DEPTH IS MAINTAINED AT A MINIMUM 3" DEPTH.
3. ADD MULCH WHEN BELOW THE 3" MINIMUM DEPTH. DO NOT EXCEED THE 6" MAXIMUM DEPTH.
4. MULCH CONTAMINATED WITH SOIL MUST BE REMOVED AND REPLACED.

MULCH PLACEMENT

(MnDOT 2571.3H)

(MnDOT 2571.3F)

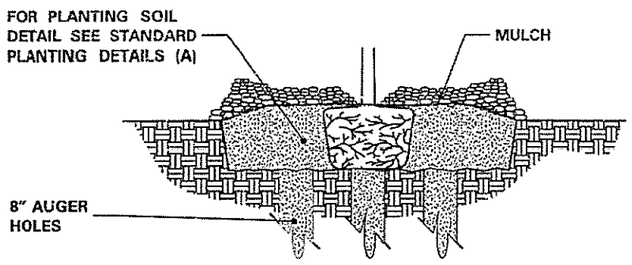
DATE PRINTED: JANUARY /01/2011

DRAWN BY OFFICE OF TECHNICAL SUPPORT

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION
OFFICE OF TECHNICAL SUPPORT
LANDSCAPE ARCHITECTURE UNIT
TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

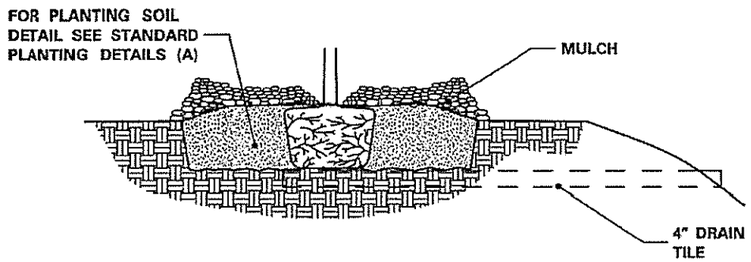
STANDARD PLANTING DETAILS (B)

STATE PROJECT 1804-87 (T.H. 169) SHEET NO. 19 OF 24 SHEETS



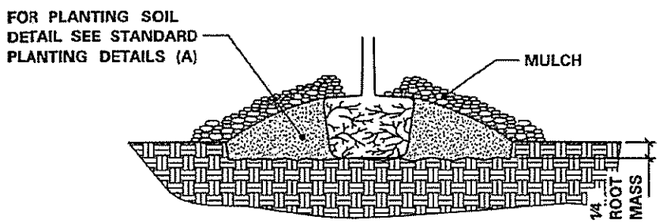
1. EXCAVATE HOLE OR BED TO ALLOW PLACING THE TOP OF ROOT MASS 1"-3" HIGHER THAN FINISHED GRADE.
2. AUGER 8" DIAMETER HOLES ENTIRELY THROUGH IMPERVIOUS OR POORLY DRAINED HARD PAN SOIL LAYER TO ADEQUATELY DRAIN SUBSOIL.
3. TEST FOR POSITIVE DRAINAGE. RE-AUGER AN ADDITIONAL 8" IF NECESSARY FOR POSITIVE DRAINAGE.
4. THOUROUGHLY BACKFILL AUGER HOLES WITH A UNIFORM INCORPORATED MIXTURE OF 50% SAND AND 50% INPLACE SOIL.
5. COMPLETE PLANTING ACCORDING TO ROOT TYPE. SEE STANDARD PLANTING DETAILS (B).

INSTALL GRANULAR FILTER



1. EXCAVATE HOLE OR BED TO ALLOW PLACING THE TOP OF THE ROOT MASS 1"-3" HIGHER THAN FINISHED GRADE.
2. INSTALL 4" MINIMUM DIAMETER DRAIN TILE DAYLIGHTING AT A LOWER GRADE.
3. COMPLETE PLANTING ACCORDING TO ROOT TYPE. SEE STANDARD PLANTING DETAILS (B).

INSTALL TILE DRAINAGE



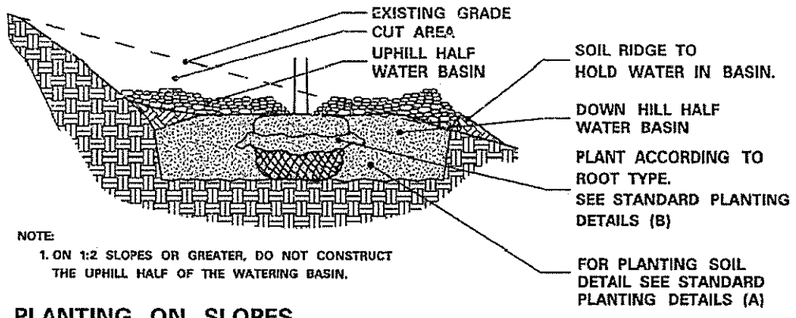
1. EXCAVATE HOLE OR BED 1/4 THE DEPTH OF THE ROOT MASS.
2. SET ROOT MASS IN HOLE.
3. CONSTRUCT BERM WITH PLANTING SOIL. EXTEND THE BERM BASE TO A WIDTH OF 3 TIMES THE BERM HEIGHT.
4. COMPLETE PLANTING ACCORDING ROOT TYPE. SEE STANDARD PLANTING DETAILS (B).

INSTALL MINI-BERM

NOTE:
1. THE NEED FOR USING PLANTING DETAILS FOR POORLY DRAINED SOILS AND WHICH TYPE TO USE ARE DETERMINED BY THE CONTRACTOR, SUBJECT TO ENGINEER APPROVAL.

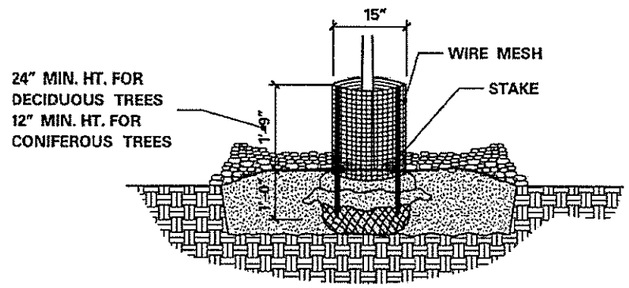
PLANTING DETAIL FOR POORLY DRAINED SOILS

(MnDOT 2571.3D2 (STEP 8)



NOTE:
1. ON 1:2 SLOPES OR GREATER, DO NOT CONSTRUCT THE UPHILL HALF OF THE WATERING BASIN.

PLANTING ON SLOPES

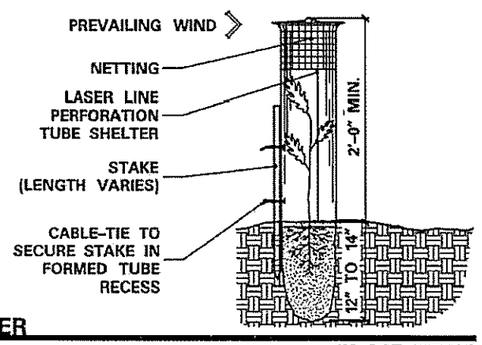


1. FORM A DOUBLE-LAYERED CYLINDER USING 0.25" GRID GALVANIZED WELDED WIRE MESH (HARDWARE CLOTH). OVERLAP THE CUT END 2".
2. DRIVE TWO 1" x 1" OPPOSING HEARTWOOD WHITE OAK STAKES INTO THE GROUND, 7" FROM THE CENTER OF THE TREE STEM.
3. SECURE THE MESH CYLINDER TO THE OUTSIDE OF THE STAKES USING EITHER, SCREWS AND WASHERS OR CABLE-TIES ALONG THE OVERLAP. SPACE APPROXIMATELY 4" ON CENTER ALONG THE OVERLAP.
   a. SCREWS SHALL BE ROUND HEAD GALVANIZED 1/8" DIA. x 3/4" LONG WITH WASHERS.
   OR
   b. CABLE-TIES SHALL BE NYLON, AT LEAST 8" LONG AND BETWEEN 75LB TO 120LB TENSILE STRENGTH.
4. EMBED THE LOWER EDGE OF THE MESH CYLINDER 1" BELOW THE SOIL SURFACE WITHOUT DISTURBING THE TREE ROOTS.
5. CUT EDGES WILL NOT BE PERMITTED AT THE TOP OF THE CYLINDER. STAKE WILL BE FLUSH WITH THE TOP OF THE CYLINDER.
6. MULCH WITHIN THE CYLINDER SHALL NOT EXCEED 3" DEPTH AND SHALL BE PULLED BACK FROM THE TRUNK AS SPECIFIED IN MULCH PLACEMENT DETAIL.
7. THE BOTTOM WHORL OF PINE AND LARCH BRANCHES MAY HAVE TO BE REMOVED TO PERMIT INSTALLATION OF 12" MIN. HEIGHT RODENT GUARDS.
8. INSTALL ON ALL DECIDUOUS, PINE AND LARCH TREES, DO NOT PLACE ON SPRUCE TREES.

RODENT PROTECTION

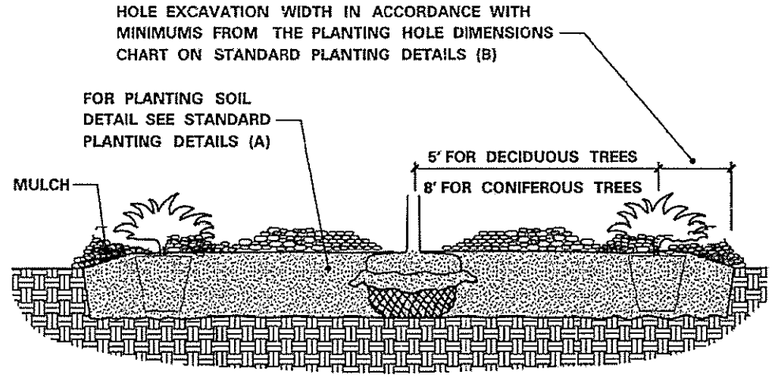
(MnDOT 2571.3I2)

1. USE SEAMLESS, EXTRUDED, TWIN-WALL, RIGID AND SEMI TRANSLUCENT POLYPROPYLENE TUBES WITH A LASER LINE PERFORATION AND AN OUTWARD-FLARED TOP RIM.
2. SECURE SHELTER WITH NYLON CABLE-TIES ATTACHED TO A 1" x 1" WHITE OAK STAKE TO PREVENT DISLODGING OR TWISTING.
3. EMBED THE BOTTOM OF THE TUBE A MINIMUM OF 1" BELOW THE SOIL SURFACE WITHOUT DISTURBING THE TREE ROOTS.
4. INSTALL A PLASTIC PHOTODEGRADABLE NETTING COVER AND SLEEVE OVER THE TOP OF THE TUBE. PULL NETTING DOWN AS SHOWN.

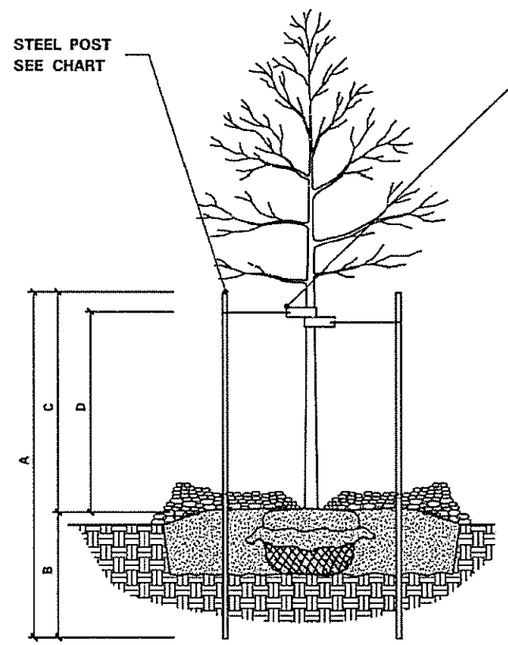


SEEDLING TREE SHELTER

(MnDOT 2571.3I4)



PLANT SPACING IN MASS BEDS



1. STEEL POSTS TO BE NOTCHED OR DRILLED TO RETAIN GUY WIRES. PLACE OUTSIDE OF ROOT BALL. DRIVE PLUMB REGARDLESS OF GROUND SLOPE.
2. REQUESTS TO SUBSTITUTE RUBBER HOSE AND WIRE GUYING SYSTEMS WILL NOT BE APPROVED.
3. TREE STAKING IS NOT REQUIRED UNLESS SPECIFIED OR NECESSARY TO MAINTAIN TREES IN A PLUMB CONDITION WHERE VANDALISM, SOIL, OR WIND CONDITIONS ARE A PROBLEM, OR AS DIRECTED BY THE ENGINEER.
4. REMOVE WITHIN ONE YEAR.

STEEL POST SIZING

CALIPER	STEEL POST TYPE	A	B	C	D
LESS THEN 4 INCHES	ROLLED STEEL FENCE POST (MnDOT 3403) OR APPROVED EQUAL.	7'-0"	3'-0" MIN.	4'-0"	3'-0"
GREATER THEN 4 INCHES	10', 2.2 LB. FLANGED CHANNEL STEEL SIGN POST (MnDOT 3401) OR APPROVED EQUAL.	10'-0"	4'-0" MIN.	6'-0"	5'-0"

STAKING AND GUYING

(MnDOT 2571.3I1)

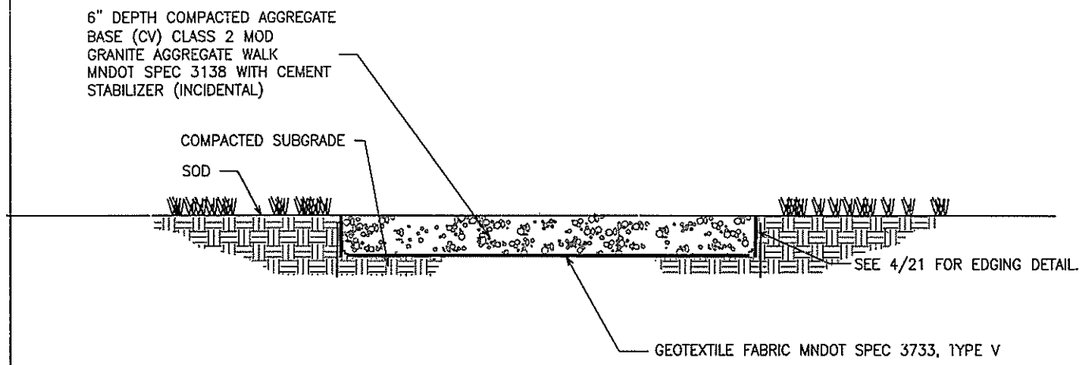
DATE PRINTED:
JANUARY / 01 / 2011

DRAWN BY
OFFICE OF TECHNICAL SUPPORT

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION
OFFICE OF TECHNICAL SUPPORT
LANDSCAPE ARCHITECTURE UNIT
TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155-1899

STANDARD PLANTING DETAILS (C)

STATE PROJECT 1804-87 (T.H. 169) SHEET NO. 20 OF 24 SHEETS

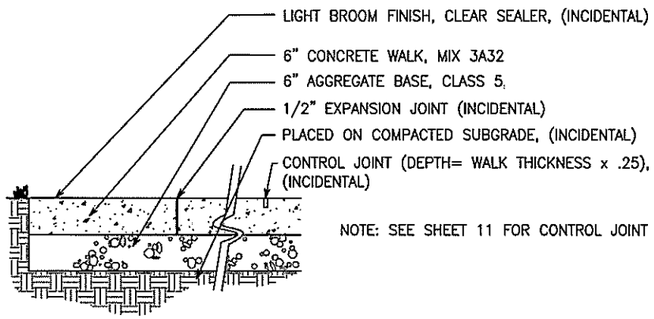


NOTE: AGGREGATE WALK TO BE STABLIZED WITH PORTLAND CEMENT USING THE FOLLOWING PROCESS:

1. ENSURE MATERIALS ARE KEPT DRY BEFORE AND DURING EARLY STAGES OF INSTALLATION.
2. IN AREAS WHERE WALK WILL CROSS PIPE, PLACE AGGREGATE BASE AS PER DETAIL 1/14 AT APPROPRIATE DEPTH TO ACCOMMODATE 6 INCH DEPTH WALK AT GRADES SPECIFIED (SEE PLAN, SHEET 14).
3. PLACE EDGER SO TOP EDGE WILL BE FLUSH WITH FINISH GRADE OF AGGREGATE WALK.
4. ON SITE, IMMEDIATELY BEFORE WALK INSTALLATION, THOROUGHLY MIX INTO AGGREGATE 3% PORTLAND CEMENT, KEEPING MATERIALS FREE OF DEBRIS OR OTHER MATERIALS.
5. PLACE AND COMPACT AGGREGATE–CEMENT MIX 6–IN DEPTH.
6. MOISTEN WALK THOROUGHLY, BUT NOT TO SATURATION, BY SPRINKLING WATER.
7. COVER WALKS WITH PLASTIC, SECURE EDGES WITHOUT MARRING AGGREGATE, AND LEAVE UNDISTURBED FOR 72 HOURS.

1 | STABILIZED AGGREGATE WALK

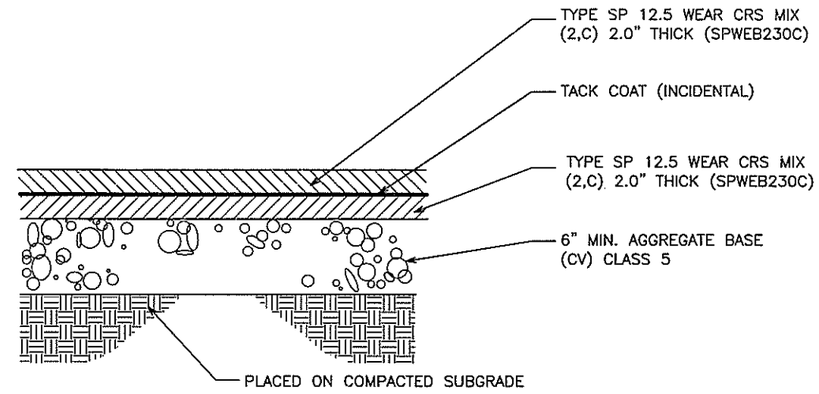
0 1 2 SCALE IN FEET



NOTE: SEE SHEET 11 FOR CONTROL JOINT LAYOUT

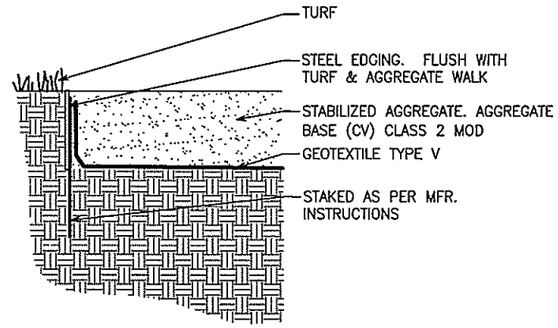
2 | CONCRETE WALK

0 1 2 SCALE IN FEET



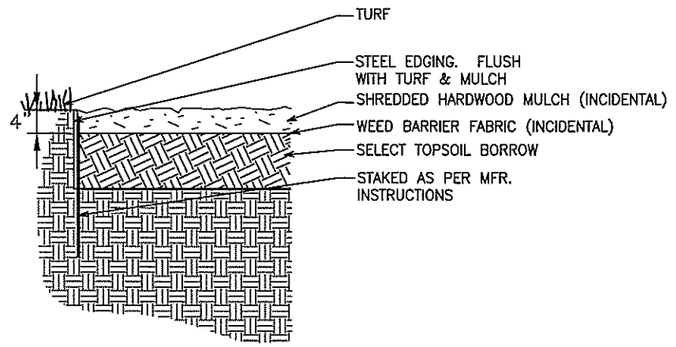
3 | BITUMINOUS PAVEMENT

0 .5 1 SCALE IN FEET



4 | STEEL EDGING DETAIL FOR AGGREGATE WALKS

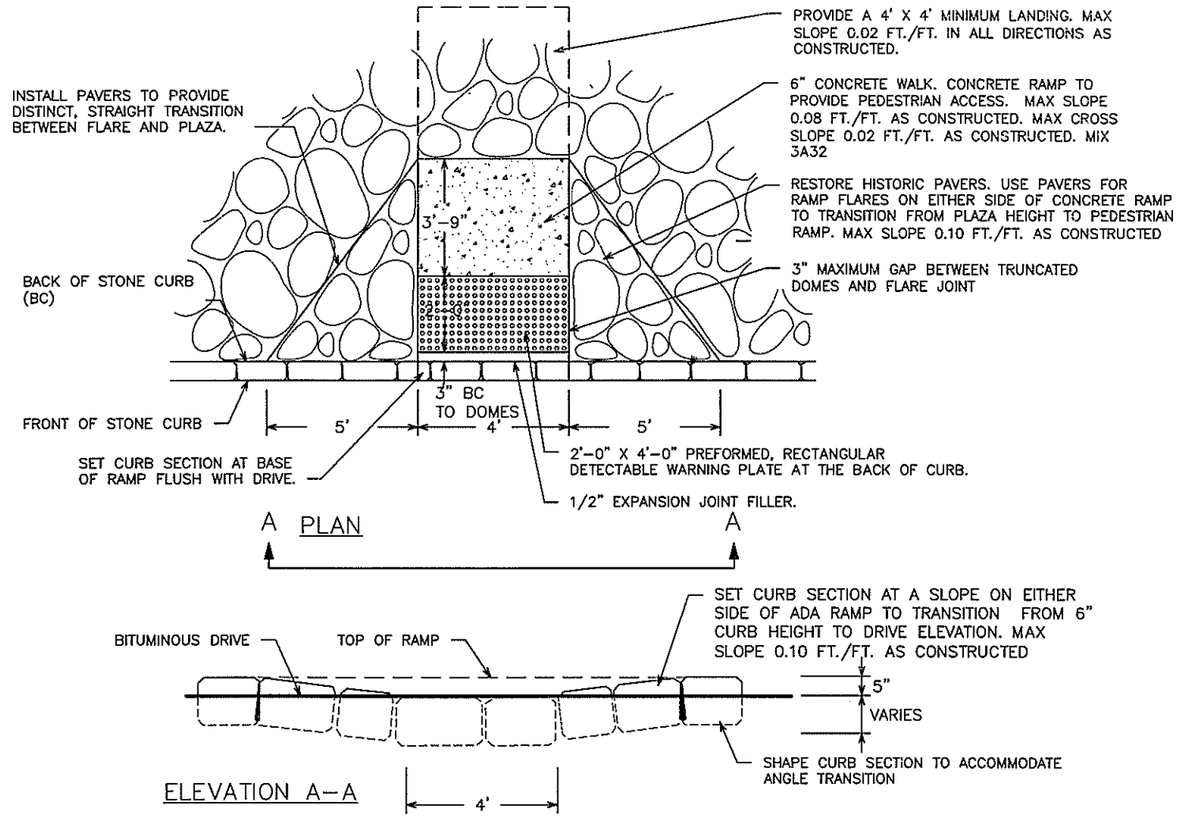
NTS



5 | STEEL EDGING DETAIL FOR PLANTING AREAS

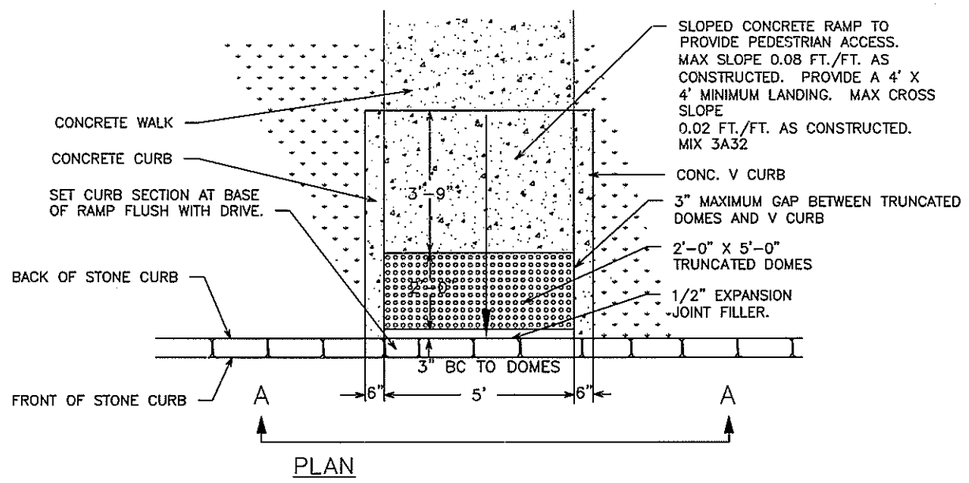
NTS

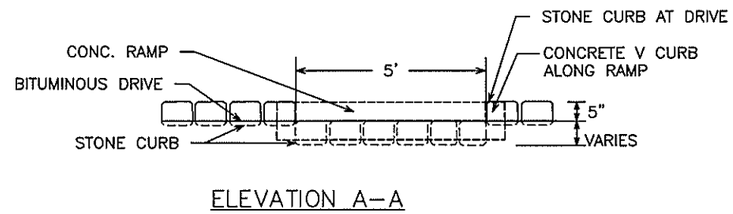
DATE MODIFIED: 12 SEPT 2012	DRAWN BY: JJZ CHECKED BY: RLG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J MCFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41742	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155–1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON SITE DETAILS
FILE SERVER LOCATION: K:\g-m\MnDOT\14867000\arch\dwgs					STATE PROJECT 1804–87 (TH169) | SHEET NO. 21 OF 24 SHEETS



1 | PEDESTRIAN CURB RAMP – 6" CONCRETE WALK

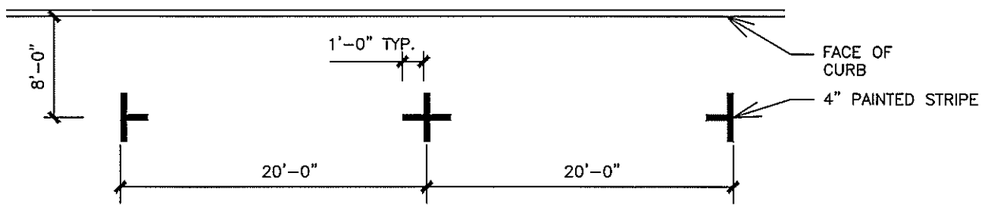
0 2 4 SCALE IN FEET





2 | PEDESTRIAN CURB RAMP – 6" CONCRETE WALK

0 2 4 SCALE IN FEET



NOTE: THE STRIPING SHALL BE HANDICAP BLUE AND IS INCIDENTAL.

3 | HANDICAPPED STRIPING DETAIL

0 5 10 SCALE IN FEET

DATE MODIFIED: 12 SEPT 2012	DRAWN BY: JJZ CHECKED BY: RLG	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden PRINTED NAME: KATHRYN J McFADDEN DATE: SEPTEMBER 12, 2012 LIC. NO. 41762	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155-1899	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON SITE DETAILS
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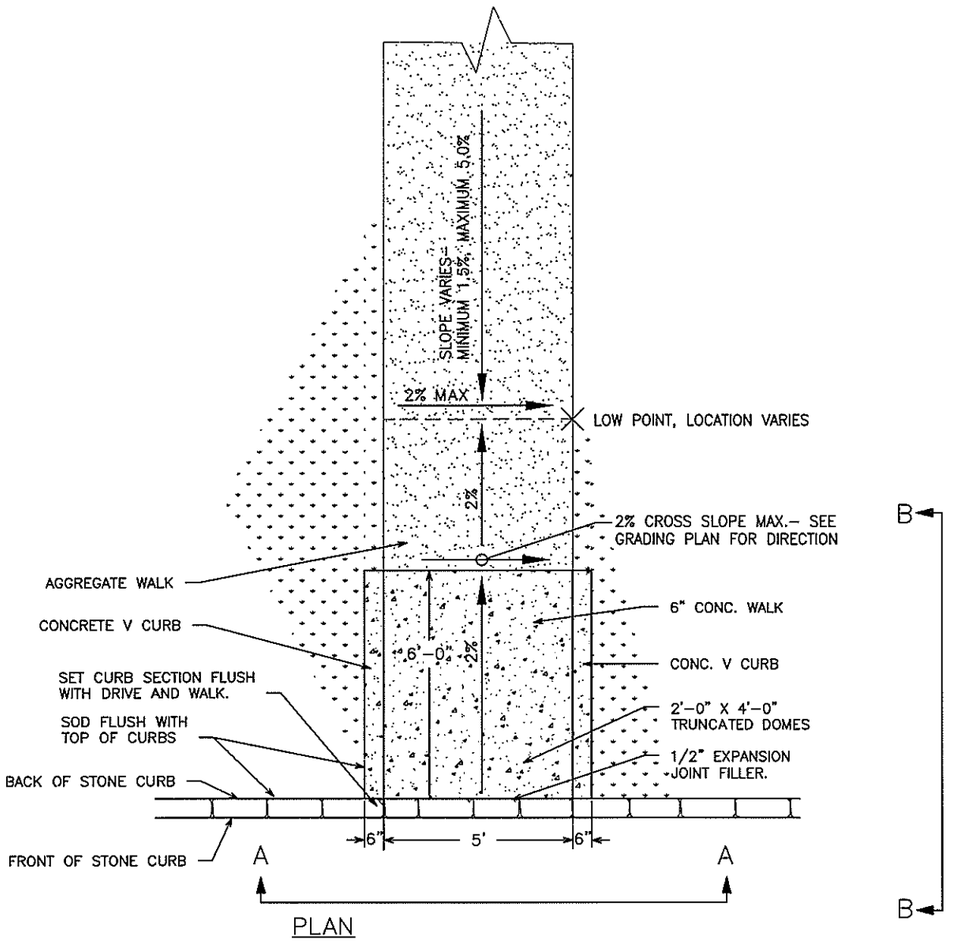
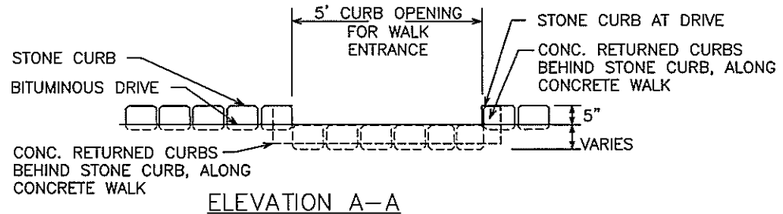
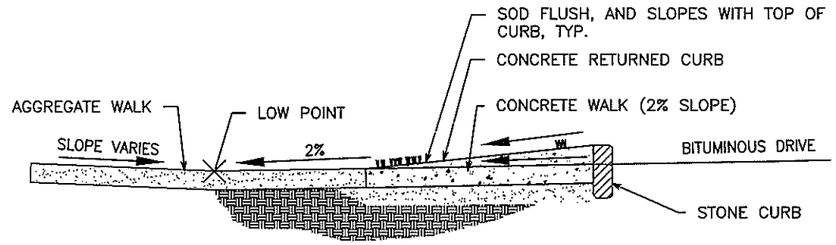


PLAN



ELEVATION A–A

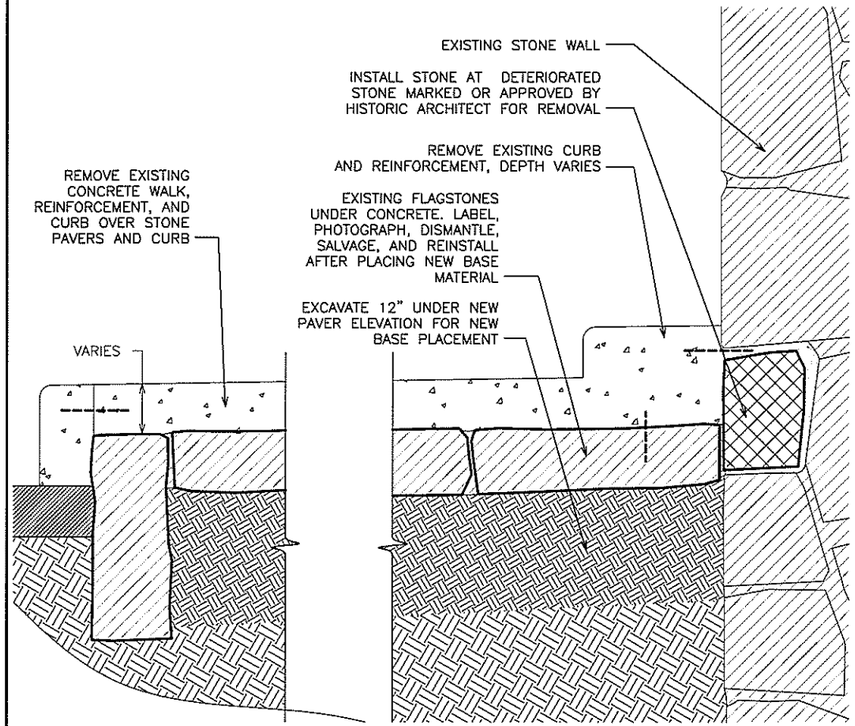


SECTION B–B

1 PEDESTRIAN CURB RAMP – 6" CONCRETE WALK

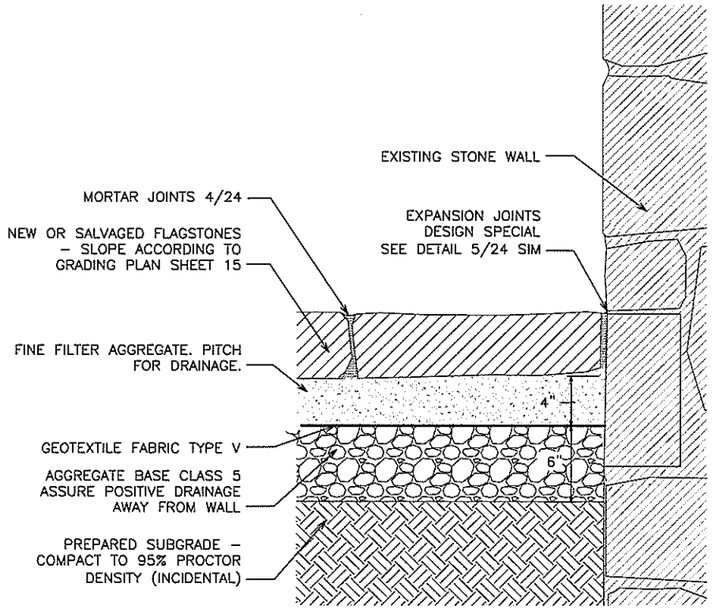
0 2 4 SCALE IN FEET

DATE MODIFIED: 12 SEPT 2012	DRAWN BY: JJZ	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.	SIGNATURE: Kathryn J McFadden		STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION	GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
	CHECKED BY: RLG		PRINTED NAME: KATHRYN J MCFADDEN			SITE DETAILS
FILE SERVER LOCATION: K:\g–m\MnDOT\14867000\arch\dwgs			DATE: SEPTEMBER 12, 2012 LIC. NO. 41742		TRANSPORTATION BUILDING ST. PAUL, MINNESOTA 55155–1899	STATE PROJECT 1804–87 (TH169) / SHEET NO. 23 OF 24 SHEETS



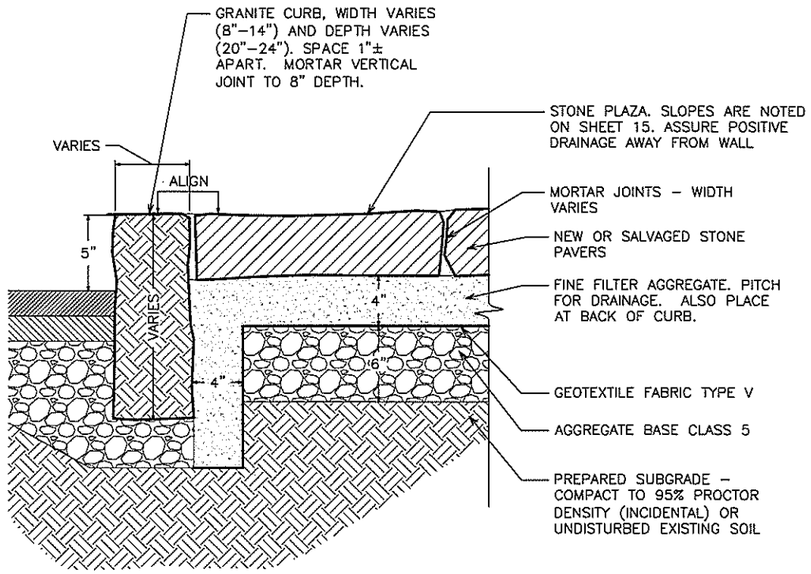
1 | EXISTING CONCRETE DETAIL AT WALK AND CURB

0 1 SCALE IN FEET



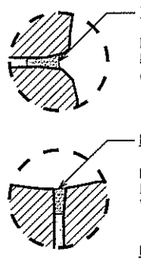
2 | STONE PAVER PLACEMENT AT WALK

0 1 SCALE IN FEET



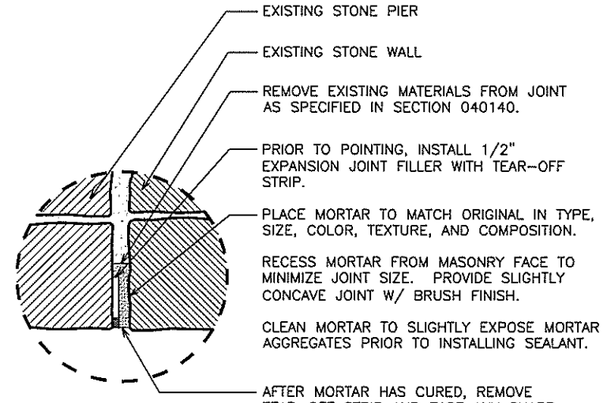
3 | STONE PAVER PLACEMENT AT CURB

0 1 SCALE IN FEET



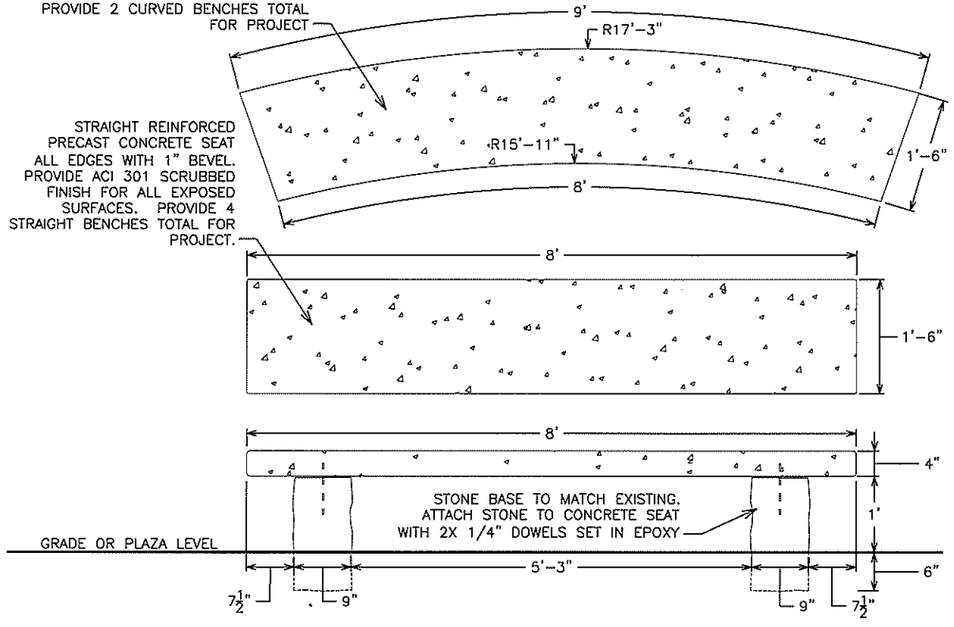
4 | MORTAR REPOINTING DETAILS

0 1 SCALE IN FEET



5 | EXPANSION JOINTS DESIGN SPECIAL

0 1 SCALE IN FEET



6 | BENCH DETAIL

0 6 12 SCALE IN INCHES

DATE MODIFIED: AUGUST 23, 2012	DRAWN BY: TAG
	CHECKED BY: TAG
FILE SERVER LOCATION: M:\Projects\Garrison Concourse\Construction Documents\Garrison.dwg	

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

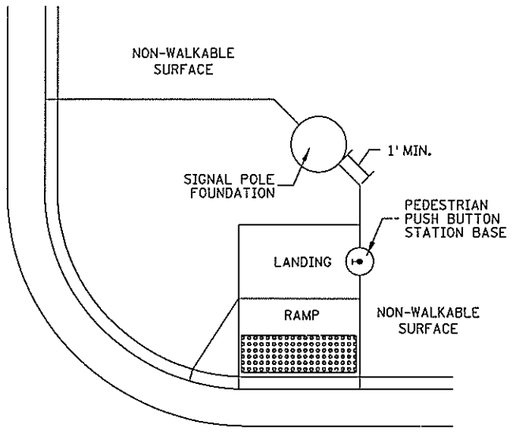
SIGNATURE: _____
PRINTED NAME: TODD GROVER
DATE: AUGUST 23, 2012 LIC. NO. 43014

MacDONALD & MACK ARCHITECTS

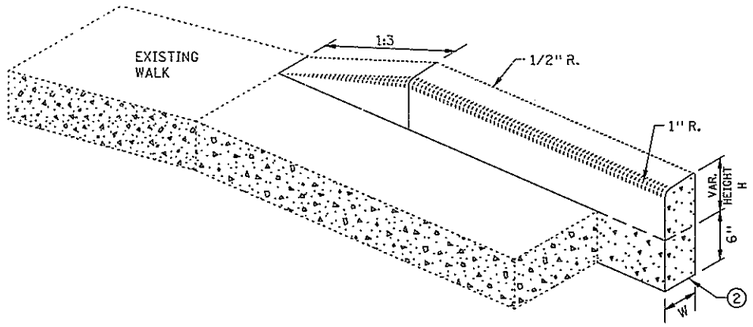
STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION BUILDING
ST. PAUL, MINNESOTA 55155–1899

GARRISON CONCOURSE OVERLOOK – CITY OF GARRISON
WALL, STONE PLAZA, AND BENCH DETAILS

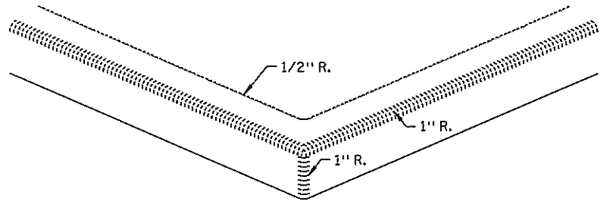
STATE PROJECT 1804–87 (TH169) | SHEET NO. 24 OF 24 SHEETS



CONCRETE WALK EDGES ADJACENT TO CONCRETE STRUCTURES

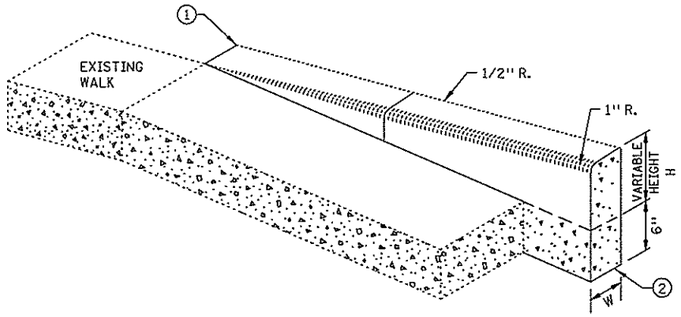


V CURB ADJACENT TO LANDSCAPE
CURB WITHIN SIDEWALK LIMITS

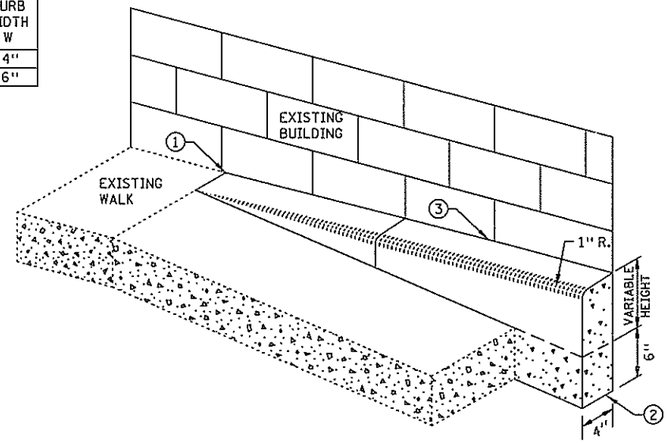


V CURB INTERSECTION

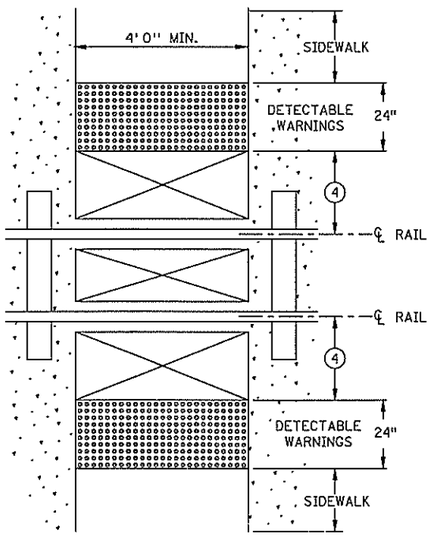
CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"



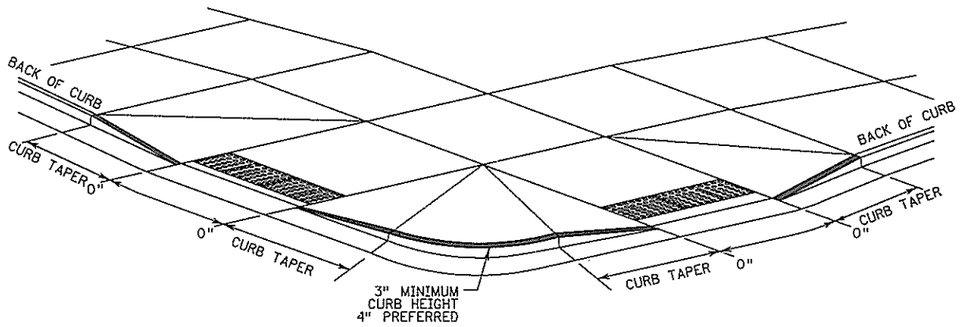
V CURB ADJACENT TO LANDSCAPE
CURB OUTSIDE SIDEWALK LIMITS



V CURB ADJACENT TO BUILDING



RAILROAD CROSSING
PLAN VIEW



DETECTABLE EDGE AT QUADRANT ⑤

NOTES:

ALL V-CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

(1) END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.

(2) ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.

(3) EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.

(4) EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 6' MINIMUM TO 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL.

(5) ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES TRUNCATED DOMES WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TRANSITIONS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS IMMEDIATELY AT THE EDGE OF THE TRUNCATED DOMES AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TRANSITION AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILTY GUIDELINES.

STANDARD PLAN SHEET NO. 5-297.250 (5 OF 5)	PEDESTRIAN CURB RAMP DETAILS
STANDARD APPROVED: MAY 10, 2012	