

2100 Pennsylvania Avenue NW Sustainable Approaches

Overview

This project has been mandated to be environmentally responsible and to be certified using the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) criteria. The project Owner/Developer was already planning to incorporate sustainable design and construction elements in the project, some of which are rewarded by the LEED rating system. A brief summary of sustainable strategies being considered and implemented follows.

LEED

The U.S. Green Building Council (USGBC) established the LEED program as a tool to evaluate the energy efficiency and environmental impacts of building projects. The LEED building rating system uses seven categories in which projects can obtain credits to achieve certification (Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality and Innovation & Design Process, and Regional Priority). Four levels of certification are available. The credit threshold for each level of certification varies for different rating systems. To qualify for certification a project must meet certain prerequisite credits. The number of additional credits required is dependent on the level of certification that the project is seeking to attain.

The project has been registered as a LEED®v4 Core and Shell (CS) projects with USGBC. All documentation will be submitted via USGBC's website (www.leedonline.com) to be reviewed and approved by a third party for both the design and construction phases of the project. SDC, the LEED consultant, is maintaining a tracking tool and checklist to manage the responsibilities of team members, to record documentation progress, and to identify tasks required to complete documentation.

The LEED checklist, or scorecard provided shows the breakdown of points being pursued. Sixty (6o) points are required for the targeted Gold certification level. The current scorecard shows slightly less than 6o points in the 'yes' column due to the project being in an early phase. The criteria for credits shown with additional points in the 'maybe-yes' (?Y) and 'maybe-no' columns (?N) of the scorecard will be analyzed further for feasibility, and some will be pursued in order to reach the LEED-CS Gold Certification level.

Many of the targeted points are related to energy and water efficiency, which reflects a commitment to delivering a high-performance mixed-use project. Preliminary interdisciplinary analysis with the Owner and the Design Team has been conducted to identify the targeted credits and the strategies needed to fulfill credit criteria. Credits are identified as achievable based on design feasibility and potential environmental benefits. Those credits deemed achievable are scored as 'yes'; several additional credits that are being evaluated further for feasibility are scored as 'maybe-yes'.

While some credits have a greater first cost associated with them, the long term environmental and economic benefits justify including them in the LEED goals. The credits pursued are those that will help provide quality space at a greatly reduced environmental impact. Goals include the following:

- Significantly reducing or eliminating storm water runoff / pollution through rainwater collection and through a vegetated roof.
- Reducing potable water usage:
 - o Irrigation will be limited and will be designed to use little or no potable water.
 - o Water savings of 30 35% for interior plumbing will be realized through the use of water conserving fixtures such as low-flush toilets, and low flow faucets and showerheads.
 - o Reuse of rainwater for cooling tower make-up is proposed.
- Reducing energy consumption by designing a high-performance building envelope and adopting high efficiency HVAC systems
- Improving productivity and occupant health by access to daylight and views
- Meeting ASHRAE 55 standards to ensure thermal comfort and providing thermal controls to ensure accommodation of the individual preferences of its occupants.
- Installing low-emitting paints, adhesives, sealants and flooring systems.

Other Strategies

In keeping with Boston Properties' vision that the project addresses environmental issues "beyond" LEED, the Design Team is exploring several aspects of sustainable strategies. The goal is do more than obtain a LEED plaque; it is to create a building that stays 'green' during operation and supports both inhabitants and neighbors.

This started with selecting a site that meets Smart Growth initiatives. The project's location is in line with urban planning and transportation goals of concentrating growth in walkable, bike-friendly and transit-oriented areas.

In keeping with the District's benchmarking requirements and Boston Properties' goals, operational energy and water use will be reported. The company's website,

http://www.bostonproperties.com/pages/sustainability, includes an annual Sustainability Report in addition to the goals and key performance indicators of green building features.

Operational Policies under consideration include Green Leasing as well as Health and Wellness Programs such as Green Housekeeping.

1432 K Street NW, 3rd Floor Washington, DC 20005 202-667-1620 2100 PENNSYLVANIA AVENUE NW

Washington, DC



1025 Connecticut Ave., NW, Ste. 300 Washington, DC 20036 T 202 857 8300



WILES MENSON COMPONATION CO 11860 Sunrise Valley Drive, Ste 200 Reston, VA 20191



2200 Pennsylvania Ave.NW, Ste. 200W Washington, DC 20037 T 202 585 0847

Seal/Signature

Date

09/21/2017

Project Name

2100 PENNSYLVANIA AVENUE NW

Project Number

A1613

Description

PRELIMINARY LEED
NARRATIVE

Scale

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2100 PENNSYLVANIA AVENUE NW

Washington, DC











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Washington, DC 20037
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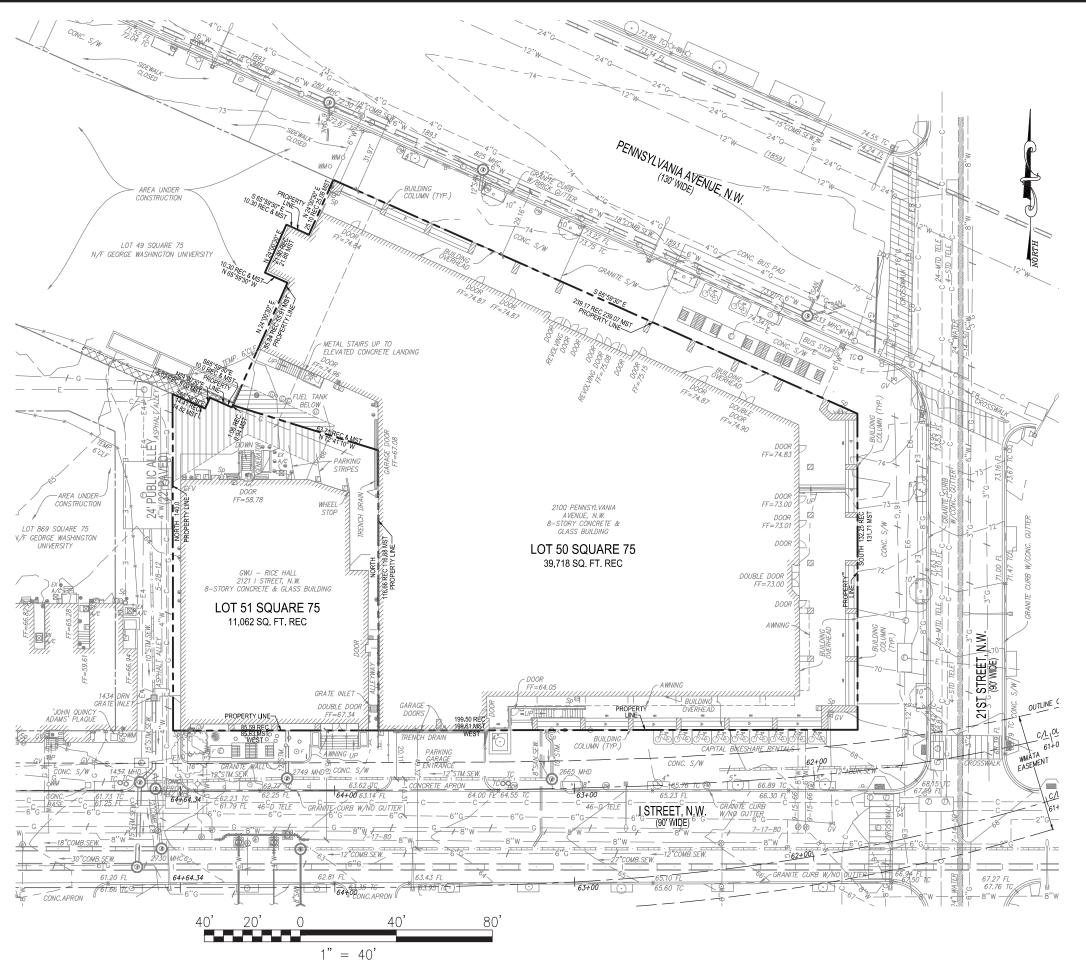
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Description

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STRUCTURE TABLE	
STRUCTURE DETAILS	
RIM = 71.63 18" INV IN = 60.90 SE 12" INV IN = 66.76 NE 18" INV OUT = 60.79 NW	
RIM = 72.57 18" INV IN = 61.84 SE 6" INV IN = 69.94 S 18" INV OUT = 61.78 NW	
RIM = 73.08 18" INV IN = 62.48 SE 12" INV IN = 63.83 S 18" INV OUT = 62.37 NW	
RIM = 74.07 6" INV IN = 65.91 NE 6" INV IN = 65.31 E 18" INV OUT = 64.55 NW	
RIM = 62.65 10" INV IN = 58.80 N 15" INV OUT = 58.80 S	
RIM = 61.77 12" INV IN = 52.13 E 15" INV IN = 58.00 NE 15" INV OUT = 51.90 S	
RIM = 61.42 12" INV IN = 50.93 N 12" INV OUT = 50.66 S	
RIM = 64.99 10" INV IN = 58.35 N 12" INV OUT = 56.53 W	
RIM = 61.90 12" INV IN = 50.93 N 12" INV IN = 50.63 E 18" INV OUT = 50.50 W	
RIM = 63.09 12" INV IN = 55.06 E 12" INV IN = 53.05 N 12" INV OUT = 52.98 W	

GENERAL NOTES:

- GENERAL NOTES:

 1. THE INFORMATION SHOWN RESULTS FROM A FIELD SURVEY BY WILES MENSCH CORPORATION, LAST DATE OF FIELD SURVEY NOVEMBER 2, 2016.

 2. BOUNDARY INFORMATION SHOWN HEREON WAS OBTAINED FROM OFFICIAL CITY RECORDS, AND VERIFIED IN THE FIELD INSOFAR AS POSSIBLE. PROPERTY LINE DIMENSIONS FROM OFFICIAL RECORDS MAY NOT NECESSARILY AGREE WITH ACTUAL MEASURED DIMENSIONS. ALL PROPERTY LINES IN THE DISTRICT OF COLUMBIA ARE SUBJECT TO CHANGE BY THE OFFICE OF THE SURVEYOR, D.C.

 4. ELEVATIONS SHOWN ARE REFERENCED TO DCDPW DATUM (BM 5 & 6), MERIDIAN REFERENCED TO DCSO NORTH BY HOLDING RECORD BEARING OF PENNSYLVANIA AVENUE, N.W.

 5. MERIDIAN REFERENCED TO DCSO NORTH BY HOLDING RECORD BEARING ON PENNSYLVANIA AVENUE, N.W.

 6. PROPERTY IS IDENTIFIED AS ZONE X AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS IDENTIFIED ON FIRM COMMUNITY PANEL 110001 0018C, EFFECTIVE DATE SEPTEMBER 27, 2010.

2100 PENNSYLVANIA **AVENUE NW** Washington, DC



WDG 202 463 2198





Boston Properties

2200 Pennsylvania Ave.NW, Ste. 200W Washington, DC 20037 T 202 585 0847

Seal/Signature

Date

09/21/2017

Project Name

2100 PENNSYLVANIA AVENUE NW

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Description

EXISTING CONDITIONS PLAN

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EXISTING CONDITIONS PLAN





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Pelli Clarke Pelli Architect 322 Eighth Avenue, 11th Floor New York, N0001

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Seal/Signature

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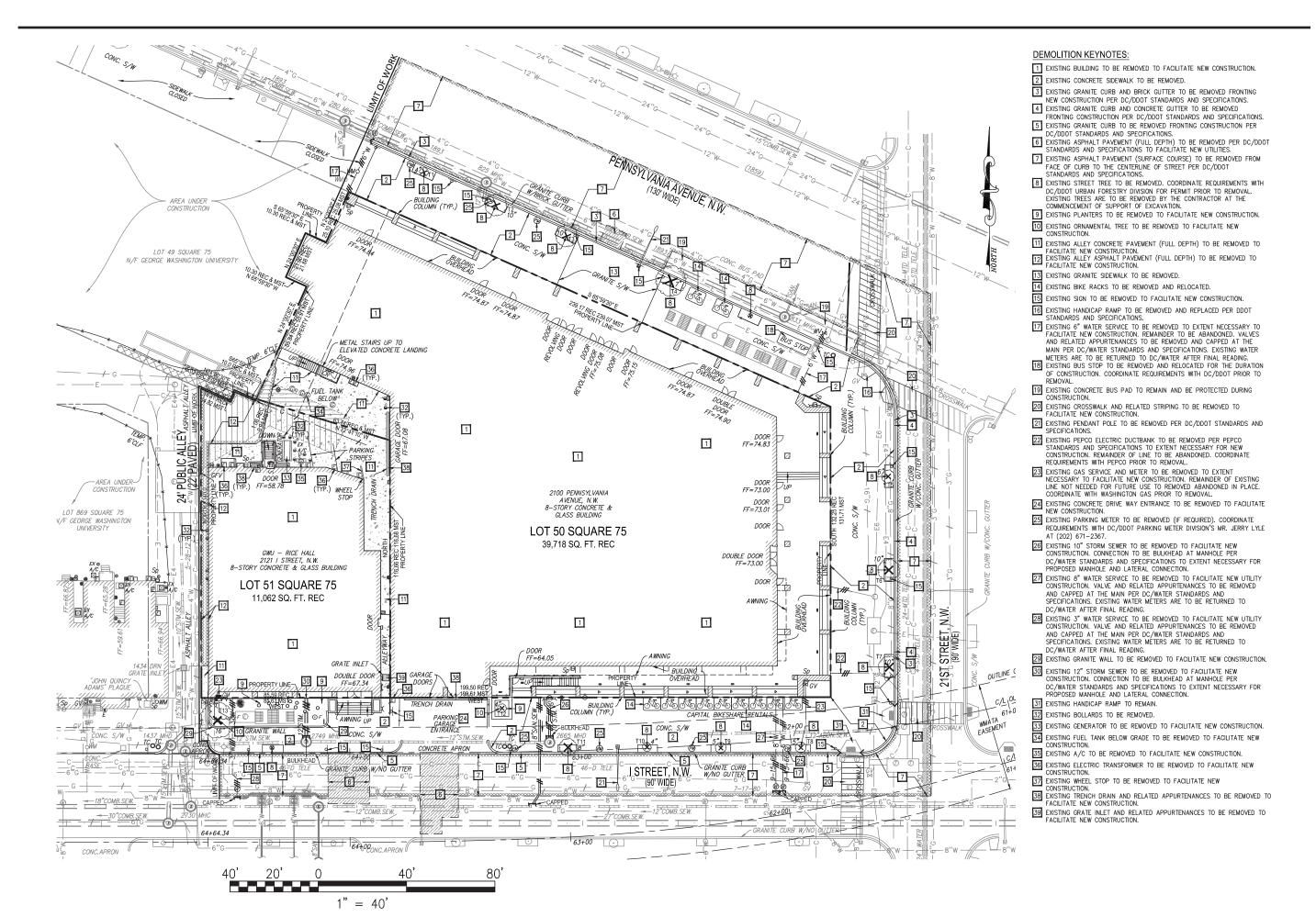
Description

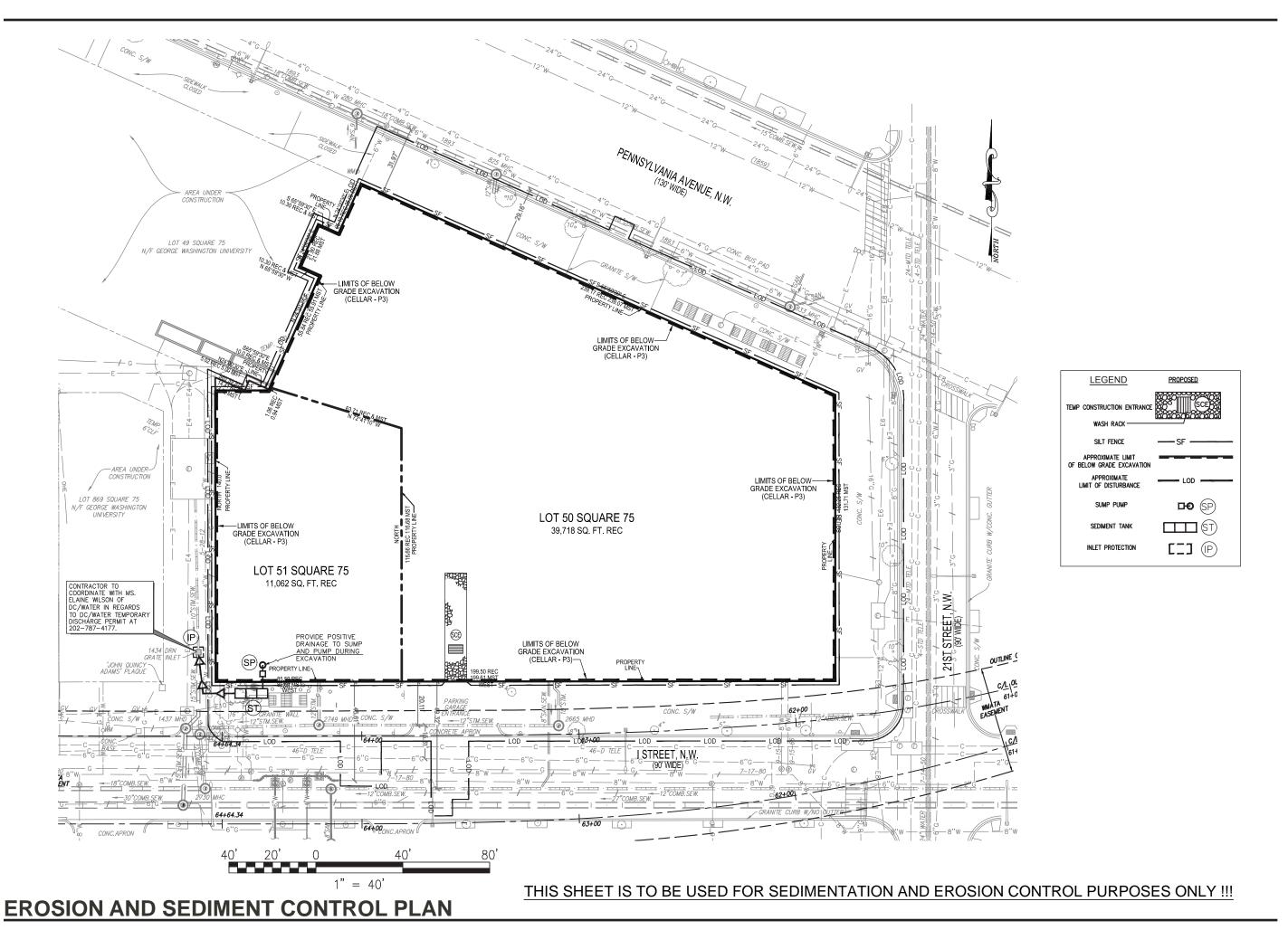
DEMOLITION PLAN

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Project Name

2100 PENNSYLVANIA AVENUE NW

Project Number

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Description

EROSION AND SEDIMENT CONTROL PLAN

Scale

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2100 **PENNSYLVANIA AVENUE NW**

Washington, DC



WDG

F 202 463 2198



322 Eighth Avenue, 11th Floor New York, New York 10001

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Description

EROSION AND SEDIMENT CONTROL NOTES

Scale

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STANDARD EROSION AND SEDIMENT CONTROL MEASURES

- SEDIMENT TRAPS OR BASINS AND OTHER EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED NO LATER THAN THE FIRST PHASE OF LAND GRADING.
- 2. SEDIMENT TRAPS OR BASINS AND OTHER EROSION AND SEDIMENT CONTROLS, SHALL BE INSTALLED AS SOON AS NEW SITE-RELATED RUNOFF IS DETECTED AND EMPLOYED AT ALL TIMES, TO PROTECT INLETS OR STORM SEWERS BELOW SILT-PRODUCING
- NO LATER THAN THE FIRST DAY OF CONSTRUCTION, INSTALL SITE ACCESS MEASURES TO MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS. EACH CONSTRUCTION ENTRANCE MUST BE STABILIZED AND INCLUDE EACH ADDITIONAL MEASURE, REQUIRED TO KEEP SEDIMENT FROM BEING CARRIED ONTO PUBLIC STREETS BY CONSTRUCTION VEHICLES AND WASHED INTO A STORM DRAIN OR WATERWAYS.
- REMOVE OFF-SITE ACCUMULATIONS OF SEDIMENT DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF A DOEE INSPECTOR.
- 5. PERFORM ROUTINE MAINTENANCE TO PREVENT ANY NEW DESTABILIZED AREAS.

EROSION AND SEDIMENT CONTROL NARRATIVE:

THE OVERALL EROSION AND SEDIMENT CONTROL PLAN ON THE SITE CONSISTS OF SILT FENCE, INLET PROTECTION, SUMP PUMP, SEDIMENT TANK, AND STABILIZED CONSTRUCTION ENTRANCE.

DESCRIPTION OF PREDOMINANT SOIL TYPE:

DUST CONTROL NOTES:

- 1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
- 2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
- 3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
- 4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON—SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS DECEMBED TO PROFESSIONAL MEATURES. REQUIRED TO PREVENT DUST EMISSIONS.
- 5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR
- A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE:
- B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER; C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH
- 6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
 A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH
- DISCHARGE GAUGE, HOSES AND MIST NOZZLES;

 B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS, KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
- C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.
- 7. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.
- 8. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
- 9. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND

LAND DISTURBANCE ACTIVITY NOTE:

A PERSON RESPONSIBLE FOR LAND DISTURBANCE IS TO BE PRESENT OR AVAILABLE AT ALL TIMES WHILE SITE IS IN A PHASE INVOLVING LAND DISTURBING ACTIVITY. THE RESPONSIBLE PERSON IS RESPONSIBLE FOR INSPECTION OF THE SITE EROSION & SEDIMENT CONTROL MEASURES BIWEEKLY AND AFTER RAINFALL EVENTS. & SEDIMENT CONTROL MEASURES BIWHELKLY AND AFTER KAINFALL EVENTS.
AVAILABILITY TO RESPOND TO POTENTIAL EROSION PROBLEMS AS THEY OCCUR AND
AVAILABILITY TO SPEAK ONSITE WITH DOEE TO REMEDY POTENTIAL PROBLEMS. THE
RESPONSIBLE PERSON IS TO HAVE AVAILABLE ONSITE PROOF OF PROFESSIONAL
LICENSING OR OF SUCCESSFUL COMPLETION OF A DEPARTMENT APPROVED TRAINING PROGRAM IN COMPLIANCE OF RESPONSIBLE PERSON DESIGNATION.

CONSTRUCTION AND STABILIZATION SEQUENCE:

- INSTALL SEDIMENT AND EROSION CONTROL MEASURES INCLUDING STRAW BALE DIKES, INLET PROTECTION, SUMP PIT, PORTABLE SEDIMENT TANK, STABILIZED CONSTRUCTION ENTRANCE WITH WASH RACK, TREE PROTECTION, AND SILT FENCE AS INDICATED ON SHEET CIVO501. SEE SHEET CIVO501 FOR EROSION AND SEDIMENT CONTROL DETAILS.
- 2. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.
- 3. REMOVE ITEMS AS INDICATED ON DEMOLITION PLAN. 4. INSTALL PROPOSED UTILITIES AS INDICATED ON SHEET CIVO105
- 5. INSTALL SITE IMPROVEMENTS AS INDICATED ON CONSTRUCTION DOCUMENTS FOR
- 6. CONSTRUCT BMPS AS INDICATED ON SHEET CIVO701.
- 7. AT THE COMPLETION OF CONSTRUCTION AND AFTER THE INSPECTOR'S APPROVAL, ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED.

EROSION AND SEDIMENT CONTROL NOTE:

- 1. THE APPLICANT MUST NOTIFY THE DEPARTMENT OF ENERGY AND ENVIRONMENT BY PHONE (202-535-2977) AT LEAST 72 HOURS PRIOR TO THE START OF LAND DISTURBING ACTIVITY AND WITHIN (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, DEPARTMENT OF ENERGY AND ENVIRONMENTAL MIST BE ADDITIONATED INSPERIOR FOR THE STATE OF THE STA ENVIRONMENT MUST BE NOTIFIED IMMEDIATELY.
- 2. REMOVAL OF ANY EROSION AND SEDIMENT CONTROL MEASURES REQUIRES APPROVAL FROM DOEE INSPECTOR.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT
- 4. PROVIDE SILT FENCE AT PERIMETER OF EXCAVATION AREA TO REMAIN IN PLACE UNTIL BELOW GRADE EXCAVATION HAS BEGUN UNLESS OTHERWISE APPROVED BY
- CONTRACTOR TO PROVIDE ON SITE APPROVED STAMPED AND SIGNED SEDIMENTATION AND EROSION CONTROL DRAWINGS BY DEPARTMENT OF ENERGY AND ENVIRONMENT, WATERSHED PROTECTION DIVISION.
- 6. PROVIDE A CHAIN LINK FENCE AT PERIMETER OF SITE
- 7. NO LATER THAN THE FIRST DAY OF CONSTRUCTION, INSTALL SITE ACCESS MEASURES TO MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS. EACH CONSTRUCTION ENTRANCE MUST BE STABILIZED AND INCLUDE EACH ADDITIONAL MEASURES REQUIRED TO KEEP SEDIMENT FROM BEING CARRIED ONTO PUBLIC STREETS BY CONSTRUCTION VEHICLES AND WASHED INTO A STORM DRAIN OR
- 8. REMOVE OFF-SITE ACCUMULATION OF SEDIMENT DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF DOEE INSPECTOR.
- 9. PERFORM ROUTINE MAINTENANCE TO PREVENT ANY NEW DE-STABILIZATION
- 10. STRAW BALE DIKES WILL BE REPLACED EVERY THREE (3) MONTHS UNTIL COMMENCEMENT OF CONSTRUCTION.

LSTNW WASHINGTON K ST NW CIRCLE NW PENNSYLVANIA I ST NW H ST NW **VICINITY MAP**

SCALE: 1" = 200' <u>SQUARE:</u> 75 <u>LOT:</u> 50 & 51 ADDRESS: 2100 PENNSYLVANIA AVE. NW. & 2121 I-STREET, NW. WASHINGTON, DC.

TOTAL SITE AREA:

TOTAL SITE AREA: 50,780 SF / 1.1657 AC

TOTAL VOLUME OF CUT OF BELOW GRADE EXCAVATION: (CELLAR)

TOTAL AREA OF EXCAVATION: 50,653 SF / 1,1628 AC VOLUME OF CUT: (50,653) SQ.FT. (AREA) X (22.5) FEET (DEPTH)

VOLUME OF CUT: (42,211) cy +/-

TOTAL VOLUME OF CUT OF BELOW GRADE EXCAVATION: (P1 - P3)

TOTAL AREA OF EXCAVATION: 50,653 SF / 1.1628 AC VOLUME OF CUT: (50,653) SQ.FT. (AREA) X (30) FEET (DEPTH)

VOLUME OF CUT: (56,280) cy +/-

TOTAL VOLUME OF CUT: (98,491) cy +/-

TOTAL VOLUME OF CUT /FILL FOR UTILITIES: TOTAL AREA OF EXCAVATION: 575 SF / 0.0132 AC

VOLUME OF CUT: (575) SQ.FT. (AREA) X (7) FEET (DEPTH)

VOLUME OF CUT AND FILL: (149) cy +/-

TOTAL AREA OF DISTURBANCE:

TOTAL AREA OF DISTURBANCE: 70,917 SQUARE FEET OR 1.6280 AC

CONSTRUCTION DATES:

THE PROPOSED WORK DUE TO COMMENCE SPRING 2018 AND IS ANTICIPATED TO TAKE APPROXIMATELY 12 MONTHS.

EXACT BEGINNING AND END OF CONSTRUCTION IS TO BE ESTABLISHED BY THE

ENFORCEMENT OF SIGNAGE REQUIREMENT FOR PROJECTS REQUIRING EROSION AND SEDIMENT CONTROL PLANS:

ALL CONSTRUCTION PROJECTS REQUIRING SOIL EROSION AND SEDIMENT CONTROL
(ESC) PLANS MUST POST A DISTRICT—APPROVED SIGN THAT NOTIFIES THE PUBLIC
TO CONTACT DOEE IN THE EVENT OR EROSION OR OTHER POLLUTION FROM THE
SITE. DOEE HAS INCREASED ITS ENFORCEMENT EFFORTS FOR THIS REQUIREMENT. A
LIMITED NUMBER OF PRE—PRINTED SIGNS IS AVAILABLE AT THE DEPARTMENT OF
CONSUMER AND REGULATORY AFFAIRS AND WILL BE ISSUED AT NO CHARGE WITH
APPROVED SOIL EROSION AND SEDIMENT CONTROL PLANS ON A FIRST COME, FIRST
SERVED BASIS. AN ELECTRONIC COPY OF THE DISTRICT APPROVED SIGN IS
AVAILABLE AT HITTE-/OPEE DIS COVIÉSS AVAILABLE AT HTTP: //DOEE.DC.GOV/ESC.

EROSION AND SEDIMENT CONTROL NOTES

TREE PROTECTION AND REPLACEMENT NOTES:

TREE PRO IECTION AND KEPLALEVIEIN INVILO.

A DESCRIPTION
WORK UNDER THIS INFOLINGS PROVIDING PROTECTION FOR EMSTING TREES
WITHIN THE PROJECT LIMITS DURING CONSTRUCTION OF EMSTINGS. WORK SHALL
INCLUDE PROTECTION BY FERCING OF ALL TREES WITHIN THE PROJECT
BOUNDAMERS AS INDICATED ON THE CONTRACT DOCUMENTS.
THE CONTRACTOR IS LIABLE FOR REPLACEMENT AND REPAIR OF TREES OR
COMPENSATION FOR TREES DAMAGED OR RILLIED THROUGH NEGLET OR FAILURE
TO APPLY TREE PROTECTION DURING CONSTRUCTION OPERATIONS.
FAILURE OF THE CONTRACTOR OF MAPILEMENT TREE CONSERVATION MEASURES OR
TREE REPLACEMENT, AS DIRECTED BY THE DISTRICT ACCORDING TO THE
SCHEDULE OF PAYMENT CONTAINED HEREIN, ANY KEPLACEMENT DETERMINED TO
SCHEDULE OF PAYMENT CONTAINED HEREIN, ANY KEPLACEMENT DETERMINED TO
BE REQUIRED BY THE ENGREEN MUST BE PERFORMED WITHIN YOU (2) WEEKS OF
NOTIFICATION, UNLESS OUTSIDE OF THE PLANTING SEASON, IN WHICH ASSE
REPLACEMENT MUST DOCUMENT THIN THE PRIST TOW (2) WEEKS OF THE PLANTING REPLACEMENT MUST OCCUR WITHIN THE FIRST TWO (2) WEEKS OF THE PLANTING

SEASON.

B. METHODS AND MATERIALS:
PROTECTION FROM DAMAGE CAUSED BY THE CONTRACTOR'S EQUIPMENT OR CARRESSNESS SHALL CONSIST OF THE FOLLOWING METHODS AND MESSIRES:
ALL TIRES TO BE PRESERVED SHALL BE PROTECTION FANSIT DAMAGE DURING CONSTRUCTION OPERATIONS BY PENCING. THE TIRE PROTECTION FANSIS DAMAGE CONTRACT OF THE PROTECTION OPERATIONS SHALL BE PROTECTION OF THE PROTECTION FANSIS OF THE MINIMAL ACCEPTABLE THE PROTECTION ARE SHOWN IN DE CONTRACT DOCUMENTS. NO EQUIPMENT, TRALERS OR MATERIALS MAY BE PLACED WITHIN THE PROPERTY OF PROJECT LIMITS WITH THE EXCEPTION OF PARED AREAS OR AREAS TO BE PAYED.
ANY DAMAGE DONE TO EMISTING TIRE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR'S URBAN FORESTRY ADMINISTRATION.

IF ANY TREES NOT DESIGNATED TO BE REMOVED ARE SEVERELY NUMBER OF A RESERVENCY OF THE PROPERTY OF THE CONTRACTOR'S OPERATIONS FOR ANY DEASON, THEY SHALL BE REPLICED IN INDIB BY THE CONTRACTOR'S OPERATIONS FOR ANY DEASON, THEY SHALL BE REPLICED IN INDIB BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DISTRICT, OR BY PAYMENT IN LIQUIDATED DAMAGES ACCORDING TO THE FOLLOWING SCHEDULE:

- \$200 PER INCH OF DIAMETER

- \$200 PER INCH OF DIAMETER

- THE DIAMETER OF THE TREE TRUNK SHALL BE MEASURED BREAST HIGH (4 TO 5 FEET) ABOVE THE GROUND. REPLACEMENT SHALL BE DONE ON A DBH INCH PER DBH INCH DRSS (1 DBH INCH OF REPLACEMENT TREES PER DBH INCH OF ADMAGED TREES). TREES REPLACED IN KIND SHALL BE PLANTED IN ACCORDANCE WITH 608.02. THE ENGINEER SHALL BE SOLELY RESPONSIBLE FOR DETERMINING WHETHER OR NOT A GIVEN NULRY IS SUFFICIENT TO WARRANT REPAIR, REPLACEMENT OR MONTARY COMPENSATION BY THE CONTRACTOR.

METRICIALENT ON MORPHAN COMPRESSION BY THE CONTRIBUTION.

TREE PROTECTION FENCING: TREE PROTECTION FENCING SHALL CONSIST OF 6 FOOT TALL CAINAL JUNK FENCE MATERIALS. FENCING SHALL PROTECT AN AREA NO SMALLER THAN 9 FOOT X 4 FOOT.

C. MEASURE AND PAYMENT:

C. MEASURE AND PAYMENT:
THE UNIT OF MEASURE WILL BE EACH. NO DIRECT MEASURE WILL BE TAKEN.
PAYMENT FOR TREE PROTECTION AND REPLACEMENT WILL BE MADE AT THE
CONTRACT UNIT PRICE PER EACH FOR TREE PROTECTION, WHICH PAYMENT WILL
INCLIDE ALL LABOR, TOOLS, MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO
COMPLETE THE REQUIRED WORK. NO PAYMENT WILL BE MADE FOR REPAIR AND
REPLACEMENT IN KIND FOR TREES DAMAGED OR KILLED DUE TO THE
CONTRACTOR'S OPERATIONS. THIS WORK WILL BE PERFORMED AT THE SOLE
EXPENSE OF THE CONTRACTORS.

THE STATE PROTECTION AND PRICE TO BE WATERED EVERY 10 DAYS FROM APRIL THROUGH
SEPTIMENT OF THE PROTECTION AND REPLACEMENT OF THE 2013 DISTRICT DEPARTMENT
OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES WILL
ANY FINES RELATED TO DAMAGE TO A STREET TREE ON A JOB SITE SHALL BE THE
CONTRACTORS. OPERATIONS. THIS WORK WILL BE PERFORMED AT THE SOLE
EXPENSE OF THE CONTRACTOR.

DDOT/URBAN FORESTRY ADMINISTRATION MARCH 2014

TREE ROOT PROTECTION:

A DESCRIPTION:

THIS WORK INCLUDES PRECAUTIONS TO BE TAKEN WHILE PERFORMING UTILITY
THIS WORK ROLDWAY WORK, SDEWALK, AND CURB INSTALLATION. WORK ALSO
INTERNOTING, ROLDWAY WORK, SDEWALK, AND CURB INSTALLATION. WORK ALSO
INFORMATION AND PLACEMENT OF PREPARED PLANTING SOL MIX AND
PERTILIZER (FERTILIZER IS NOT NEEZED UNICES AN LEIGHT IS DEFORM?)
BACKFILL ANOUND EXPOSED AND DISTURBED ROOTS, AND THE DISPOSAL OF
DECESS MATERIALS, GRACHES AND DEBRIS.

B. CONSTRUCTION METHOOS:
CONSTRUCTION OPERATIONS ADJACENT TO EXISTING TREES SHALL BE PERFORMED
IN ACCORDANCE WITH 608.07(B) TO PREVENT TRUNK, CROWN, AND ROOT DAMAGE.
TREE ROOTS SHALL NOT BE CUT UNLESS SPECIFICALLY AUTHORIZED BY THE

OUTSIDE THE TREE SPACE.

TREES LOCATED ADJACENT TO CONSTRUCTION WORK SHALL BE WATERED AT TEN

(10) DAY INTERVALS THROUGHOUT THE GROWING SEASON. THE CONTRACTOR

SHALL SUPPLY WAITENB GASS OF SAUE TUPE THAT ARE SOULD IN THE ROUDSIRY

AND FILL THEM ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS OR AT A

MINIMUM KEEPING THE BAG FULL DURING THE GROWING SEASON. NO COUPMENT,

TRALLERS, OR MATERIAL SHALL BE PLACED WHITH 20 FEET OR WITHIN THE DRIP

LINES OF ANY TREE TO BE SAVED, WHITCHEVER IS GREATER.

ANY DAMAGE DONE TO ENSING TREE TRUNKS, GROWNS, OR ROOT SYSTEMS

SHALL BE REPARED IMMEDIATELY BY THE CONTRACTOR, AT HIS EXPENSE, UNDER

THE DIRECTION OF AM ARBORDST FROM THE DEPARTMENT OF TRANSPORTATION.

URBAN FORESTRY ADMINISTRATION.

PROTECT ROOT SYSTEMS FROM DAMAGE CAUSED BY RUNOFF OR SPILLAGE ROYS OF THE ROYS OF

INSTALL MYCORRHIZAL FUNGAL INOCULATION INSIDE THE TREE PROTECTION ZONE AS REQUIRED BY THE MANUFACTURER.

AS DECIMINED BY THE INNOVATIONER.

WHERE RE-GRADING IS REQUIRED, THE FOLLOWING SHALL APPLY:
MINOR FILL: WHERE EXISTING GRADE IS 8 INCHES OR LESS BELOW ELEVATION OF
FINISH GRADE, FILL WITH MATERIAL AS SHOWN IN THE CONTRACT DRAWNGS.
PLACE MATERIAL IN A SINGLE UNCOMPACTED LAYER AND HAND GRADE TO
REQUIRED FINISH ELEVATIONS.

MODERATE FILL: WHERE EXISTING GRADE IS MORE THAN 6 INCHES (150 MM) BUT LESS THAN 12 INCHES (300 MM) BELOW ELEVATION OF FINISH GRADE, PLACE DRAINAGE FILL, FILTER FABRIC, AND TOPSOIL ON EXISTING GRADE AS FOLLOWS:

DRAINING FILL, FILL FRANCE, AND LIVESUL ON LESS TIME GROUPE STUDIORS:

(SO MAI) ABOVE ELEVATION OF FINISH GRADE AND EXTEND NOT LESS THAN 18 INCHES (450 MM) FROM TREE TRINK ON A HALL SIDES. FOR BALANCE OF AREA WITHIN DRIP LINE PERMETER, PLACE DRAINAGE FILL UP TO 6 INCHES (150 MM) BELOW ELEVATION OF GRADE.

C. MEASURE AND PAYMENT:

NO MEASURE WILL BE TAKEN FOR THIS WORK. NO DIRECT PAYMENT WILL BE MADE. THIS WORK IS CONSIDERED INCIDENTAL TO THE WORK BEING PERFORMED, THE COST OF MHICH SHALL BE CONSIDERED WHEN PREPARING BIDS FOR WORK IN THESE AREAS.

STREET TREE PROTECTION ZONE

STREET TREE PROTECTION

1. ALL EXISTING STREET TREES, TO REMAIN WITHIN A WORK ZONE UNTIL A PROJECT IS COMPLETED, REQUIRE THE FOLLOWING AS TREE PROTECTION. IF FOR ANY REASON THE SCOPE OF THE PROCECT REQUIRES WORK TO BE PERFORMED WITHIN THE FENCED PROTECTION ZONE, THE PERMIT HOLDER MUST CONTACT THE DISTRICT DEPARTMENT OF TRANSPORTATION'S UNBAN FORESTRY ADMINISTRATION AT 202-677-5133 BEFORE ENTERING.

A. SIX (6) FOOT TALL CHAIN LINK FENCING ON ALL SIDES.

B. INSTALL FENCING PRIOR TO AND MAINTAIN THROUGHOUT CONSTRUCTION, REMOVING ONLY AT THE END OF THE PROJECT.

C. FENCING SHALL PROTECT AN AREA NO SMALLER THAN 4 FEET BY 9 FEET.

O. PERVAING SHALL PROJECT AN AREA NO SMALLER THAN 4 FEET BY 9 FEET.

D. FEICHNO SHALL HAVE VERTICAL AND HORIZONTAL SUPPORT RAILINGS TO DECREASE FLEXIBILITY AND PREVENT ASCISION.

E. FEICE POSTS SHALL BE ANCHORED IN THE GROUND TO PREVENT MOVEMENT AND PROVIDE A AUTHORIZED ENTRY ONLY: CONTACT THE WARD ARBORIST AT DOOT URBAN SECURE BARRIER.

2. NO INSTALLATION OF SILT FENCE/SUPER SILT FENCE, TRENCHING, ALTERATION OR DISTURBANCE TO EXISTING GRADE: STAGING/ STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, SOIL, OR DEBRIS, DISPOSAL OF ANY MATERIALS SUCH AS CONCRETE, GAS, OIL, PAINT, AND BLACKTOP IS ALLONED WITHIN THE FENCED TICE PROTECTION ZONE.

 NO ROOTS LARGER THAN TWO (2) INCHES IN DIAMETER ARE TO BE CUT WITHOUT UFA PERMISSION. EXPOSED ROOTS TWO (2) INCHES AND LARGER IN DIAMETER SHALL BE WRAPPED IN BURLAP OR OTHER APPROVED MATERIAL AND KEPT MOIST AT ALL TIMES.

6. TREES THAT ARE PROTECTED ARE TO BE WATERED EVERY 10 DAYS FROM APRIL THROUGH SEPTEMBER.

DOEE SOIL EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES:

GENERAL NOTES:

FOLLOWING INITIAL LAND DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR INTERMISTABILIZATION MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOR THE SURFACES OF ALL PERMIETER CONTROLS, DIRES, SWALES, DITCHES, PERMIETER SLOPES, AND SLOPES GREATER HAM TIRRE Q. 3) HORIZONTAL TO ONE (1) VERTICAL (3:1); AND FOURTEEN (14) DAYS FOR ALL OTHER DISTURBED ON GRADED AREAS ON THE PROCECT STE: THESE REQUIREMENTS DO NOT APPLY TO AREAS SHOWN ON THE PLAN THAT ARE USED FOR MATERIAL STORAGE OTHER THAN STOCKPHILMS, OF FOR THOSE AREAS ON THE FLAN WHERE ACTUAL CONSTRUCTION ACTIVITIES ARE BEING PERFORMED, MAINTENANCE SHALL BE PERFORMED SO THAT STABULZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE DISTRICT OF COLUMBUS STANDARDS AND SPECIFICATIONS FOR SOLE REGISTORY AND SEDIMENT CONTROL (ESC).

[21] DOAR \$ 542.9 (0.7)

2. ESC MEASURES SHALL BE IN PLACE BEFORE AND DURING LAND DISTURBANCE [21 DCMR § 543.6]

3. CONTACT DOEE INSPECTION (202) 535–2977 TO SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST THREE (3) BUSINESS DAYS BEFORE THE COMMENCEMENT OF A LAND-DISTURBING ACTIVITY. [21 DOMR § 503.7 (A)]

A COPY OF THE APPROVED PLAN SET WILL BE MAINTAINED AT THE CONSTRUCTION SITE FROM THE DATE THAT CONSTRUCTION ACTIVITIES BEGIN TO THE DATE OF FINAL STABILIZATION AND WILL BE AVAILABLE FOR DOEE INSPECTORS. [21 DCMR § 542.15]

5. ESC MEASURES SHALL BE IN PLACE TO STABILIZE AN EXPOSED AREA AS SOON AS PRACTICABLE AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTY CEASED BUT NO LATER THAN FOURTEN (14) DAYS FOLLOWING CESSATION, EXCEPT THAT TEMPORARY OR PERMANENT STABILIZATION SHALL BE IN PLACE AT THE END OF EACH DAY OF UNDERGROUND UTILITY WORK THAT IS NOT CONTAINED WITHIN A LARGER DEVELOPMENT SITE. [21 DCMR § 543.7]

STOCKPILED MATERIAL BEING ACTIVELY USED DURING A PHASE OF CONSTRUCTION SHALL BE PROTECTED AGAINST EROSION BY ESTABLISHING AND MAINTAINING PERIMETER CONTROLS AROUND THE STOCKPILE. [21 DCMR § 543.16 (A)]

STOCKPILED MATERIAL NOT BEING ACTIVELY USED OR ADDED TO SHALL BE STABILIZED WITH MULCH, TEMPORARY VEGETATION, HYDRO-SEED OR PLASTIC WITHIN FIFTER (15) CALENDAR DAYS AFTER ITS LAST USE OR ADDITION.

[21 DCMR § 543.16 (B)]

PROTECT BEST MANAGEMENT PRACTICES FROM SEDMENTATION AND OTHER DAMAGE DURING CONSTRUCTION FOR PROPER POST CONSTRUCTION OPERATION.
[21 DCMR § 543.5]

REQUEST A DOEE INSPECTOR'S APPROVAL AFTER THE INSTALLATION OF PERIMETER AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, [21 DCMR § 542.12 (A)]

10. REQUEST A DOEE INSPECTOR'S APPROVAL AFTER FINAL STABILIZATION OF THE SITE AND BEFORE THE REMOVAL OF EROSION AND SEDIMENT CONTROLS.

[21 DCMR § 542.12 (B)]

11. FINAL STABILIZATION MEANS THAT ALL LAND-DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND EITHER OF THE FOLLOWING TWO CRITERIA HAVE BEEN MET: (1) A UNIFORM (FOR EXAMPLE, EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) PERENNAL VEGETATIVE COVER WITH A DENSITY OF SEVENTY PERCENT (70%) OF THE NATIVE BACKOROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON ALL UNPARED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, OR (2) EQUIVALENT PERMANENT STABILIZATION MEASURES HAVE BEEN MEDIOLYDE (SUCH AS THE USE OF RIPRAP, CABIONS, OR GEO-TEXTILES).[21 DCMR § 542.12 (B.1, B.2)]

12. FOLLOW THE REQUIREMENTS OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) A MAINTAIN A LEGIBLE COPY OF THIS SWPPP ON SITE. [21 DCMR § 543.10 (B)]

IF A SITE DISTURBS 5,000 SQUARE FEET OF LAND OR GREATER, THE ESC PLAN MUST CONTAIN THE FOLLOWING STATEMENT:

HIGH THE POLICIMIST OF RESENT OR AVAILABLE WHILE THE SITE IS IN A LAND-DISTURBING PHASE. THE RESPONSIBLE PERSON IS CHARGED WITH BEING A LAND-DISTURBING PHASE. THE RESPONSIBLE PERSON IS CHARGED WITH BEING AVAILABLE TO (A) INSPECT THE SITE AND ITS ESC MEASURES AT LEAST ONCE BINEEKLY AND AFTER A RAINFALL EVENT TO DENTIFY AND REMEDY EACH POTENTIAL OR ACTUAL REGISON PROBLEM DENTIFIED BY CONSTRUCTION PERSONNEL, AND (C) SPEAK ON SITE WITH DOES TO REMEDY EACH POTENTIAL OR ACTUAL EROSION PROBLEM DENTIFIED BY CONSTRUCTION PERSONNEL, AND (C) SPEAK ON SITE WITH DOES TO REMEDY EACH POTENTIAL OR ACTUAL GROSON PROBLEM. A RESPONSIBLE PERSON SHALL BE (A) LUCENSED IN THE DISTRICT OF COLUMBIA AS A CIVIL OR GEO-TECHNICAL ENGINEER I ALMO SURVEYOR, OR ARCHITECT: OR (B) CERTIFIED THROUGH A TRAINING PROGRAM THAT DOES APPROVES, INCLUDING A COURSE ON REGISON CONTROL PROVIDED BY ANOTHER JURISDICTION. THE RESPONSIBLE PERSON SHALL KEEP ON SITE PROFO OF PROFESSIONAL LICENSING OR OF SUCCESSFUL COMPLETION OF A DOES—APPROVED TRAINING PROGRAM.

VEGETATIVE STABILIZATION:

I. SITE PREPARATION
PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A)
SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL SEDMENT CONTROL
PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BEING
DIKES, GRASSED WATERWAYS, SEDMENT BASINS, PERMETER SLOPES, AND ALL
SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND (8) FOURTEEN
DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT STIE.

DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

II. SEEDBED PREPARATION AND SEEDING APPLICATION

THE TOP LAYER OF SOIL SHALL BE LOOSENED, LIMED AND FERTILIZED BY RAKING,
DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. FLAT
AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRABLE IT.

TO 1-3 INCHES OF SOIL LOOSE AND FRABLE BEFORE SEEDING. FLAT AREAS AND
SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE TO FLABLE TO A DEPTH OF AT
LEAST 3 INCHES OF SOIL LOOSE AND FRABLE TO A DEPTH OF AT
LEAST 3 INCHES SLOPES SHALL BE LOOSE AND FRABLE TO A DEPTH OF AT
LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE

TOP 1-3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE

TOP 1-3 INCHES OF SOIL LOOSE AND FRABLE BEFORE SEEDING.

III. SOIL AMENDMENTS LIME AND FERTILIZE ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TEST APPLY THE FOLLOWING:

2 TONS PER ACRE OR 92 LBS/1,000
(PERMANENT AND SODDING SQ.FT.)
1 TON PER ACRE OR 46 LB/1,000
(TEMPORARY) 10-10-10 OR EQUIVALENT AT
1,000 LBS PER ACRE OR 23 LBS PER
1,000 SQ. FT. (PERMANENT AND SODDING) DOLOMITIC LIMESTONE FERTILIZER

IV. SEDIMENT CONTROL PRACTICES, SEEDING

"Kentucky 31" Tall Fescue 60 LBS/ACRE or 1.38 LBS/1,000 SQ. FT AND ITALIAN (ANNUAL) RYEGRASS 40 LBS/ACRE OR .91 LBS/1,000 SQ. FT. DATES: 1/2 - 10/31 5/1 - 8/14 WITH IRRIGATION

TEMPORARY SEEDING: PER GROWING SEASON ITALIAN OR PERENNIAL RYEGRASS 40 LBS/ACRE OR .92 LBS/1,000 SQ. FT. SEED:

2/1 - 4/30 AND 8/15 - 11/30 MILLET 40 LBS/ACRE OR 0.92 LBS/1,000 SQ. FT. SEED:

DATES: 5/1 - 8/14

RESIDENTIAL AND HIGH MAINTENANCE AREAS

DATES: 2/1 - 4/30 AND 8/15 - 10/31. 2. "KENTUCK" 31" TALL FESCUE
20—260 LBS/ACRE OR
5-6 LBS/ACRE OR
5-6 LBS/1,000 SQ. FT.

DATES: 2/1 – 10/31 5/1 – 8/14 IRRIGATION REQUIRED.

C. GENERAL AND LARGE ACREAGE

B. LOW MAINTENANCE AND MINING AREAS

"KENTUCKY 31" TALL FESCUE

40 LBS/ACRE OR 0.92 LBS/1,000 SQ. FT.

AND "INTERSTATE" SERICEA LESPEDEZA (INOCULATED)20 LBS/ACRE OR 0.46 LBS/1,000 SQ. FT. DATES: 2/1 - 4/30 AND 8/15 - 10/31

"KENTUCKY 31" TALL FESCUE 60 LBS./ACRE OR 1.38 LBS/1,000 SQ.FT.(0.5 kg/100 sq.m)

VII. MULCHING
ALL SEEDINGS REQUIRE MULCHING, USE MULCH ONLY DURING NON-SEEDING DATES
LINTIL SEEDING CAN BE DONE.
MULCH SHALL BE LURGITTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A
RATE OF 1 TO 2 TONS/ACRE OR 70-90 LBS/1:000 SQFT. (2 BALES) MULCH
MANTERIALS SHALL BE RELITATELY FREE OF ALL (MOND OF WEED BEDS AN) SMALL
BE FREE OF PROHINTED NOXIOUS WEEDS. SPREAD MULCH UNFORMLY
MECHANICALLY OR BY HAND, MULCH ANDORRING SHALL BE ACCOUNTED
IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER.
THIS MAY BE DONE BY MULCH NETHINGS, MULCH ANCHORING TOOL, PEG AND TIMN
OR LIQUID MULCH BINDERS.

OR LIQUID MULCH BINDER SHALL BE RAPID CURING CUTBACK ASPHALT APPLIED AT A RATE OF 200 GAL/ACRE OR 5 GAL PER 1,000 SQ. FT. SLOPES 8 FEET OR MORE HIGH USE 348 GAL/ACRE OR 8 GAL/1,000 SQ. FT.

HIGH USE 348 GAL_/ACRE OR 8 GAL_71,000 SQ. FT.

M. SCODING

CLASS OF TURFORASS SOD SHALL BE MARYLAND OR WROMIA STATE CERTIFIED OR

MARYLAND OR WROMIA STATE APPONCED SOD. SOD SHALL BE

HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS

TO BE LLAD WITH THE LONG EDGES PARALLE TO THE CONTINUE WITH STAGGERED

JOINTS WITH ALL ENDS TIGHTLY ABUTTING AND NOT OVERLAPPING. SOD SHALL BE

ROLLED AND THOROUGHLY WATERED WITHIN EIGHT HOURS OF INSTALLATION, DALLY

WATERING TO MAINTAIN 4 MICH DEPTH OF MOSTURE FOR THE FIRST WEEK IS

REQUIRED IN THE ABSENCE OF RAINFALL SOD IS NOT TO BE APPLIED ON FROZEN

GROUND.

NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1987 DISTRICT OF COLUMBIA DEPARTMENT OF CONSUMER AND REGULATORY AFFARS STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

STANDARD EROSION AND SEDIMENT CONTROL MEASURES

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING.

3. INSTALL SILT FENCE AS SHOWN.

IN NO INSTRUBED AREA WILL BE DENUDED FOR MORE THAN 7 CALENDAR DAYS.
INSTALL THE NECESSARY TEMPORARY OR PERMANENT VEGETATIVE.
STABILIZATION MEASURES TO ACHEVE ADEQUATE EROSION AND SEDIMENT CONTROL.

5. ALL CONSTRUCTION TO BE INSPECTED DAILY BY THE CONTRACTOR, AND ANY DAMAGED SILTATION OR EROSION CONTROL DEVICES OR MEASURES WILL BE REPAIRED AT THE CLOSE OF THE DAY.

ALL SILT FENCE TO BE MAINTAINED IN WORKING CONDITION. TO BE MAINTAINED IN WORKING CONDITION.

STABILIZED CONSTRUCTION ENTRANCES TO BE PERIODICALLY SUPPLEMENTED WITH ADDITIONAL STONE AS NEEDED.

CONTROLS CAN BE REMOVED AFTER THEIR CONTRIBUTING BASINS HAVE BEEN PERMANENTLY STABILIZED, AND APPROVAL OF INSPECTOR IS OBTAINED.

 $\underline{\hbox{POLLUTION PREVENTION THROUGH GOOD HOUSEKEEPING:}}$

POLUTION PREVENTION:

THE APPENDIX IS MEANT TO COMPLEMENT APPENDIX P STORMWATER HOTSPOTS AND EROSION AND SEDMENT CONTROL PLAN (ESCP), BUT NOT ROTERATE EPA'S CONSTRUCTION GENERAL PERMIT REQUIREMENTS. THESE NOTES SHALL APPEAR AS TRAMPED NOTES ON STORMWATER MANAGEMENT PLANS (SMMIPS) WHERE LAND DISTURBENCE IS RETAINED THAN 5,000 SQUARE PETAND LESS THAN ONE CARE.

THESE MOTES SHALL CONSTITUTE A MINIMUM STORMWATER POLLUTION PREVENTION PIEAN (SWPPPmin) AND PROVIDE GUIDANCE ON GOOD HOUSEKEEPING PRACTICES TO PREVENT POTENTIAL CONSTRUCTION—SITE POLLUTANT FROM INTERACTING WITI STORMWATER.

STORMWATER MANAGEMENT PLAN (SWMP) GOOD HOUSEKEEPING STAMP NOTES:

STORMATER MANAGEMENT PLAN (SWIRP) GOOD HOUSEKEEPING STAMP NOTES:

PUELS AND OILS

ON-SITE REFUELING WILL BE CONDUCTED IN A DEDICATED LOCATION AWAY FROM ACCESS TO SURFACE WATERS. INSTALL CONTAINMENT BETRIS AND, OR SCOONDARY CONTAINMENTS AROUND REFUELING AREAS AND STORAGE TANKS.
SPILLS WILL BE CLEAMED UP MMEDIATELY AND CONTAINMENTED SOILS DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL AND DISTRICT OF COUMBRIA REGULATIONS.
PETROLEUM PRODUCTS WILL BE STORED IN CLEARLY LABELED TIGHTLY SEALED CONTAINERS, ALL VEHICLES ON SITE WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE ACTIVITIES. ANY ASPHALT SUBSTANCES USED ON SITE WILL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SOLID WASTE

SOLID MATERIALS SHALL BE DISCHARGED TO SURFACE WATER. SOLID MATERIALS INCLUDING BUILDING MATERIALS, GARBAGE AND PAINT DEBRIS SHALL BE CLEANED UP DAILY AND DEPOSITED INTO DUMPSTERS, WHICH WILL BE PERIODICALLY REMOVED AND DEPOSITED INTO A LANDFILL. ABRASIVE BLASTING

ARKASYVE BLASTING WATER BLASTING, SANDBLASTING, AND OTHER FORMS OF ABRASIVE BLASTING ON PAINTED SURFACES BUILT PRIOR TO 1978 MAY ONLY BE PERFORMED IF AN EFFECTIVE CONTAINMENT SYSTEM PREVENTS DISPERSAL OF PAINT DEBRIS.

FERTILIZER FERTILIZERS WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER, WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMMATER, AND STORED IN A COVERCE SHED, PARTIALLY USED BAGS WILL BE TRANSFERRED TO A SEALABLE BIN TO AVOID SPILLS.

TRANSFERRED TO A SEALABLE BIN TO AVOID SPILLS.

PAINT AND OTHER CHEINCAS.

ALL PAINT CONTAINERS AND CURING COMPOUNDS WILL BE TIGHTLY SEALED AND
STORED WHEN HOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGES
TO THE STORM SEWERS, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO
MANIFACTURES'S RECOMMENDATIONS. SPRAY CURNS WILL BE CLEARED ON A
REMOVAL TARP, CHEMICALS USED ON STE ARE KEPT IN SMALL QUANTIES AND
IN CLOSED CONTAINERS UNDERCORPER AND KEPT OUT OF DIRECT CONTACT WITH
STORMANTER. AS WITH FUELS AND OILS, ANY INADVERTENT SILLS WILL BE
CLEAVED UP IMMEDIATELY AND DISPOSED OF ACCORDING FEDERAL AND DISTRICT
OF COLUMBIA REGULATIONS.

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE DISPOSAL AREA FORM RELEASE OIL FOR DECORATIVE STONE WORK WILL BE APPLIED OVER PALLET COVERED WITH AN ASSORBENT MATERIAL TO COLLECT EXCESS FUILD. THE ASSORBENT MATERIAL WILL BE REPLACED AND DISPOSED OF PROPERLY WHEN SATURATED.

WATER TESTING
WHEN TESTING AND, OR CLEANING WATER SUPPLY LINES, THE DISCHARGE FROM
THE TESTING PIPE WILL BE COLLECTED AND CONVEYED TO A COMPLETED
STORMWATER CONVEYANCE SYSTEM FOR ULTIMATE DISCHARGE INTO A
STORMWATER BEST IMMAGENETY PRACTICE (BMP).

STORMMENTER BEST MEANIGEMENT FRONT THE GENETY.

SANITARY WASTERS LOCATED ON SITE WILL BE SERVICES ON A REGULAR BASIS PLY A CONTRACTOR. PORTABLE LAVATORIES WILL BE LOCATED IN AN UPLAND AREA AWAY FROM DIRECT CONTACT WITH SURFACE WATERS. ANY SPILLS OCCURRING DURING SERVICING WILL BE CLEANED IMMEDIATELY, AND CONTAINANT SOILS DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL AND DISTRICT OF COLUMBA REGULATIONS.

2100 PENNSYLVANIA **AVENUE NW**

Washington, DC



WDG

202 463 2198



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Seal/Signature

Date

09/21/2017

Project Name

PENNSYLVANIA **AVENUE NW**

Project Number

A1613

Description

EROSION AND SEDIMENT CONTROL NOTES

Scale

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2100 **PENNSYLVANIA AVENUE NW** Washington, DC



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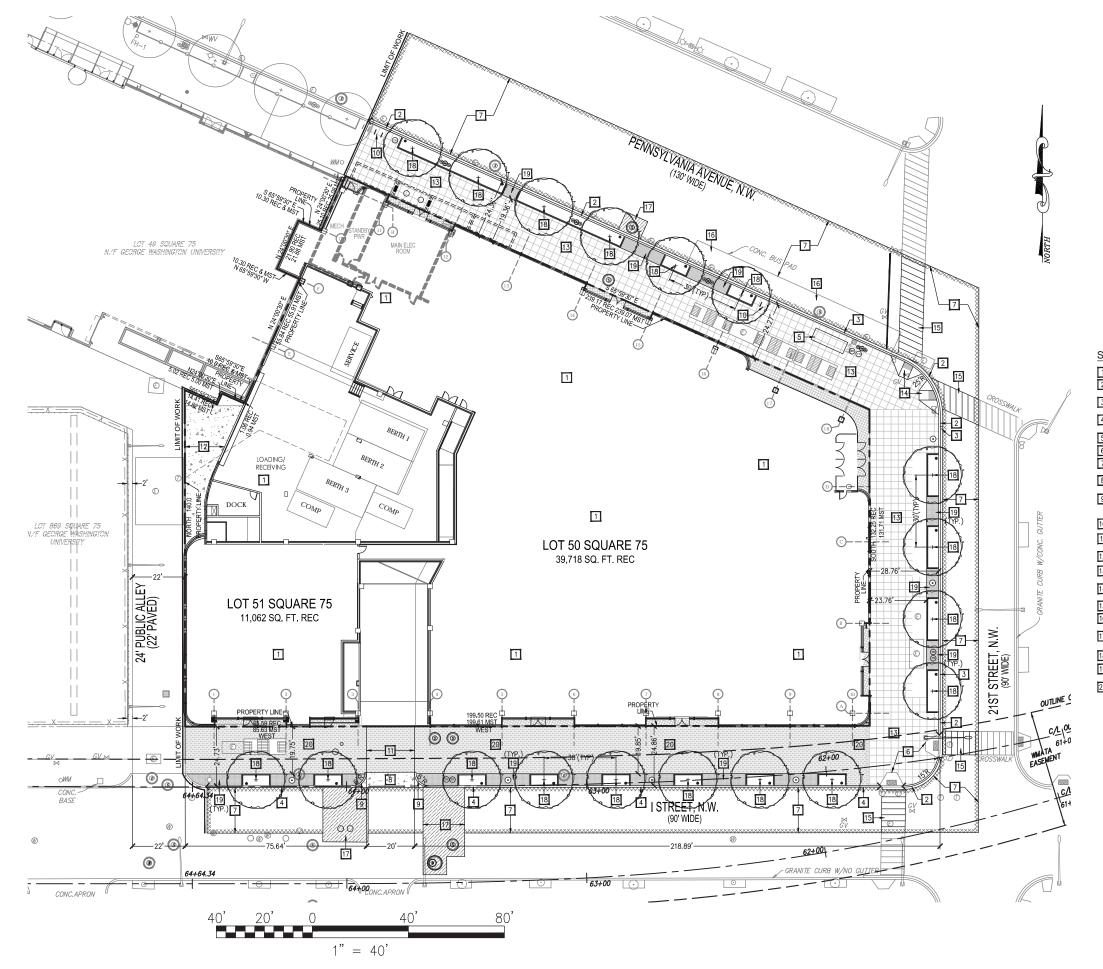
Description

SITE PLAN

Scale

C-104

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SITE KEYNOTES:

- New Building. Refer to architectural drawings for details.

 Rew Granite curb and Brick Gutter Per Dc/DDot Standards and Specifications. See Sheet Civo502 For Details.
- 3 NEW GRANITE CURB AND CONCRETE GUTTER PER DC/DDOT STANDARDS AND SPECIFICATIONS. SEE SHEET CIVO502 FOR DETAILS.
- AND SPECIFICATIONS, SEE SHEET CIVOSUS FOR DETAILS.

 NEW GRANITE CURB PER DC/DDOT STANDARDS AND SPECIFICATIONS. SEE SHEET CIVOSOS FOR DETAILS.

- SHEET CIVOSO2 FOR DETAILS.

 S NEW BUS SHELTER PER DC/DDOT STANDARDS AND SPECIFICATIONS.

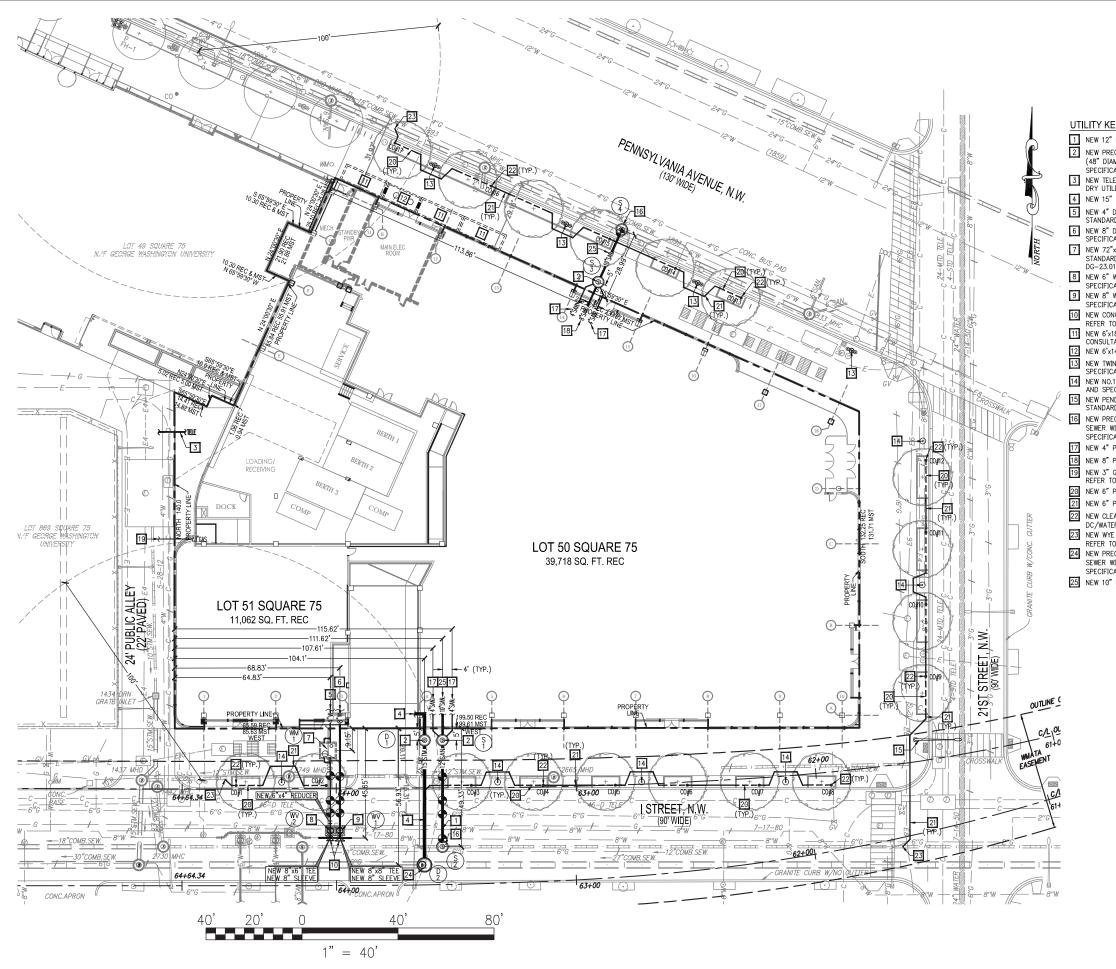
 EXISTING HANDICAP RAMPS TO REMAIN.

 NEW ASPHALT PAYEMENT SURFACE COURSE FROM FACE OF CURB TO THE CENTERLINE OF ROAD PER DDOT STANDARDS AND SPECIFICATIONS.

 NEW CONCRETE APRON PER DC/DDOT STANDARDS AND SPECIFICATIONS.
 SEE SHEET CIVOSO2 FOR DETAILS.
- SEE SHEET CIVO502 FOR DETAILS.
- NEW CONCRETE DRIVEWAY ENTRANCE WITH 6'-0" RADIUS PER DC/DDOT STANDARDS AND SPECIFICATIONS. SEE SHEET CIV0502 FOR DETAILS.
- 10 NEW BIKE RACK. REFER TO LANDSCAPE DRAWINGS FOR DETAILS.
- | NEW SCORED CONCRETE DRIVEWAY PAVEMENT PER DDOT STANDARDS AND SPECIFICATIONS. SEE SHEET CIVO502 FOR DETAILS.
- 12 NEW CONCRETE ALLEY PAVEMENT. SEE SHEET CIVO502 FOR DETAILS.
- 13 NEW 3'x3' SCORED CONCRETE SIDEWALK PER DDOT STANDARDS AND SPECIFICATIONS. SEE SHEET CIVO502 FOR DETAILS.
- 14 NEW HANDICAP RAMP PER DC/DDOT STANDARDS AND SPECIFICATIONS.
 SEE SHEET CIVO502 FOR DETAILS.
- 15 NEW CROSSWALK STRIPING PER DDOT STANDARDS AND SPECIFICATIONS.
- IG EXISTING CONCETTE BUS PAD TO REMAIN AND BE PROTECTED DURING CONSTRUCTION PROCESS.

 IT NEW ASPHALT PAVEMENT AT FULL DEPTH PER DC/DDOT STANDARDS AND SPECIFICATIONS. SEE SHEET C0502 FOR DETAILS.
- 18 NEW STREET TREE PER DC/DDOT UFA STANDARDS AND SPECIFICATIONS. 19 NEW 4"X4" COBBLESTONE PAVER. REFER TO LANDSCAPE DRAWINGS FOR
- DELINUS.

 DELINU



UTILITY KEYNOTES:

1 NEW 12" PVC SCH-40 SANITARY SEWER LATERAL.

2 NEW PRECAST CONCRETE MANHOLE FOR NEW 10" THRU 21" DIAMETER SEWER (48" DIAMETER PRECAST BASE) PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL S-20.01.

3 NEW TELECOMM SERVICE. COORDINATE REQUIREMENTS WITH VERIZON. REFER TO DRY UTILITY CONSULTANT FOR DETAILS. 4 NEW 15" RCPR STORM SEWER LATERAL SERVICE.

5 NEW 4" DIP CLASS 52 DOMESTIC WATER SERVICE LATERAL PER DC/WATER STANDARDS AND SPECIFICATIONS.

[6] NEW 8" DIP CLASS 52 FIRE SERVICE LATERAL PER DC/WATER STANDARDS AND SPECIFICATIONS. BACKFLOW PREVENTER ASSEMBLY TO MEET ASSE—1048.

7 NEW 72"x72"x72" CAST-IN-PLACE WATER METER VAULT PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL $\mathrm{DG}-23.01$.

NEW 6" WATER VALVE WITH 4.0' CASING PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL W-20.01.

 NEW 8" WATER VALVE WITH 4.0' CASING PER DC/WATER STANDARDS AND SECRET AND SECRET AND AND SECRET AND SECR

SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL W-20.01. | 10 NEW CONCRETE THRUST BLOCK PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL W-40.01.

IN NEW 6'-18' FULLY COVERED PEPCO TRANSFORMER VAULT. REFER TO DRY UTILITY

CONSULTANT FOR DETAILS.

12 NEW 6'x14' SERVICE BUSHOLE. REFER TO DRY UTILITY CONSULTANT FOR DETAILS.

NEW TWIN-20 GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. REFER TO SHEET CIVO503 FOR DETAILS.

14 NEW NO.16 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. REFER TO SHEET CIVOSO3 FOR DETAILS.

[15] NEW PENDANT POLE WITH TEAR DROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. REFER TO SHEET CIV0503 FOR DETAILS.

16 NEW PRECAST CONCRETE MANHOLE OVER EXISTING 10" THRU 21" DIAMETER SEWER WITH CAST-IN-PLACE CONCRETE BASE PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL S-20.11.

17 NEW 4" PVC SCH-40 SANITARY SEWER LATERAL.

18 NEW 8" PVC SCH-40 SANITARY SEWER LATERAL.

NEW 3" GAS SERVICE. COORDINATE REQUIREMENTS WITH WASHINGTON GAS. REFER TO DRY UTILITY CONSULTANT FOR DETAILS.

20 NEW 6" PRIVATELY MAINTAINED PVC PERFORATED PIPE.

| 21 NEW 6" PRIVATELY MAINTAINED SCH-40 SOLID PIPE. | 22 NEW CLEANOUT PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL S-80.02.

23 NEW WYE BRANCH CONNECTION PER DC/WATER STANDARDS AND SPECIFICATIONS.

REFER TO DC/WATER STANDARD DETAIL S-80.01. 24 NEW PRECAST CONCRETE MANHOLE OVER EXISTING 24" THRU 30" DIAMETER

SEWER WITH CAST—IN—PLACE CONCRETE BASE PER DC/WATER STANDARDS AND SPECIFICATIONS. REFER TO DC/WATER STANDARD DETAIL S-20.12.

25 NEW 10" PVC SCH-40 SANITARY SEWER LATERAL.

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Date

09/21/2017

Project Name

2100 PENNSYLVANIA AVENUE NW

Project Number

A1613

Description

UTILITY PLAN

Scale

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Description

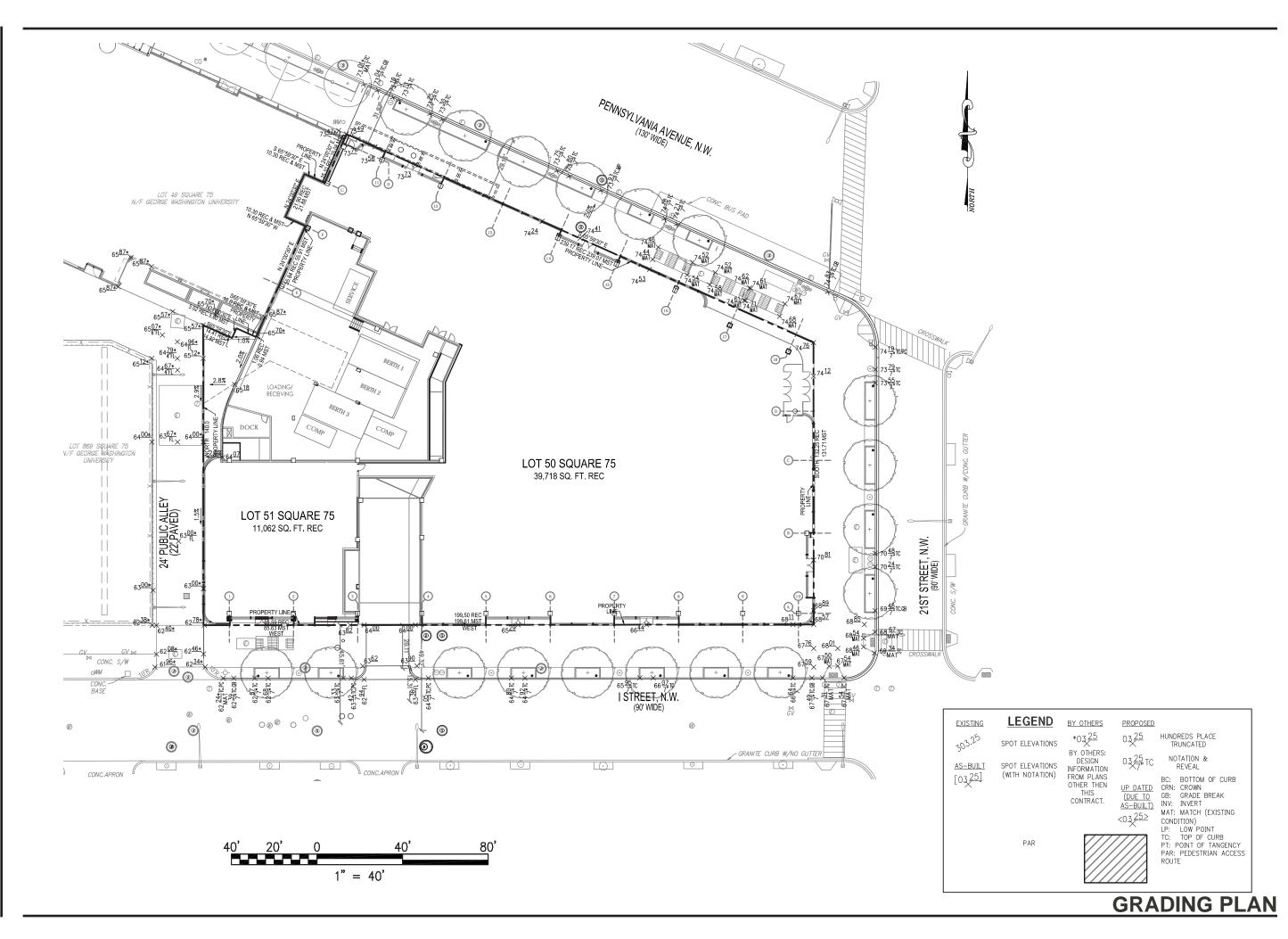
GRADING PLAN

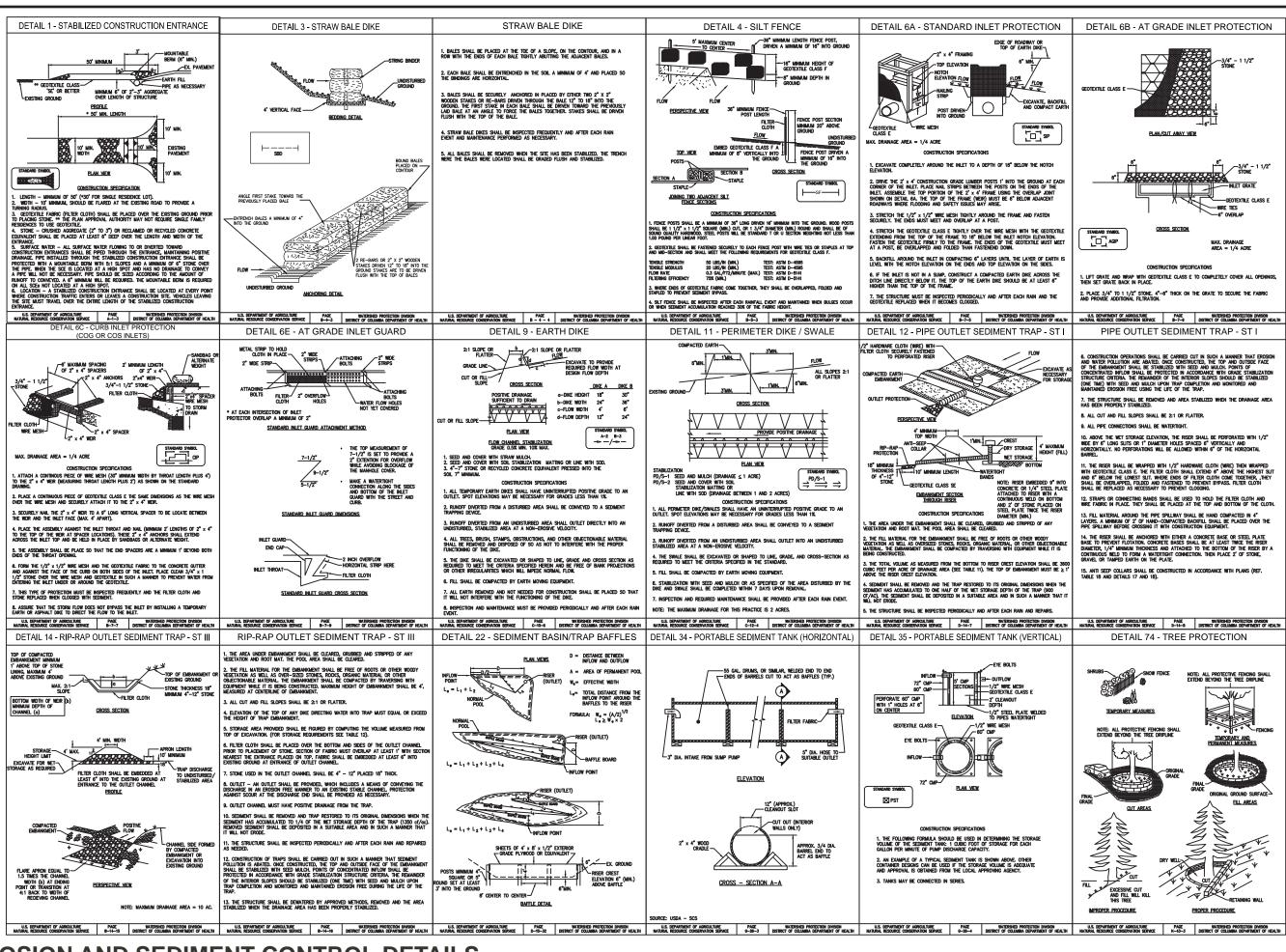
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C-106

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Project Number

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Description

EROSION AND
SEDIMENT
CONTROL DETAILS

Scale

C- 501

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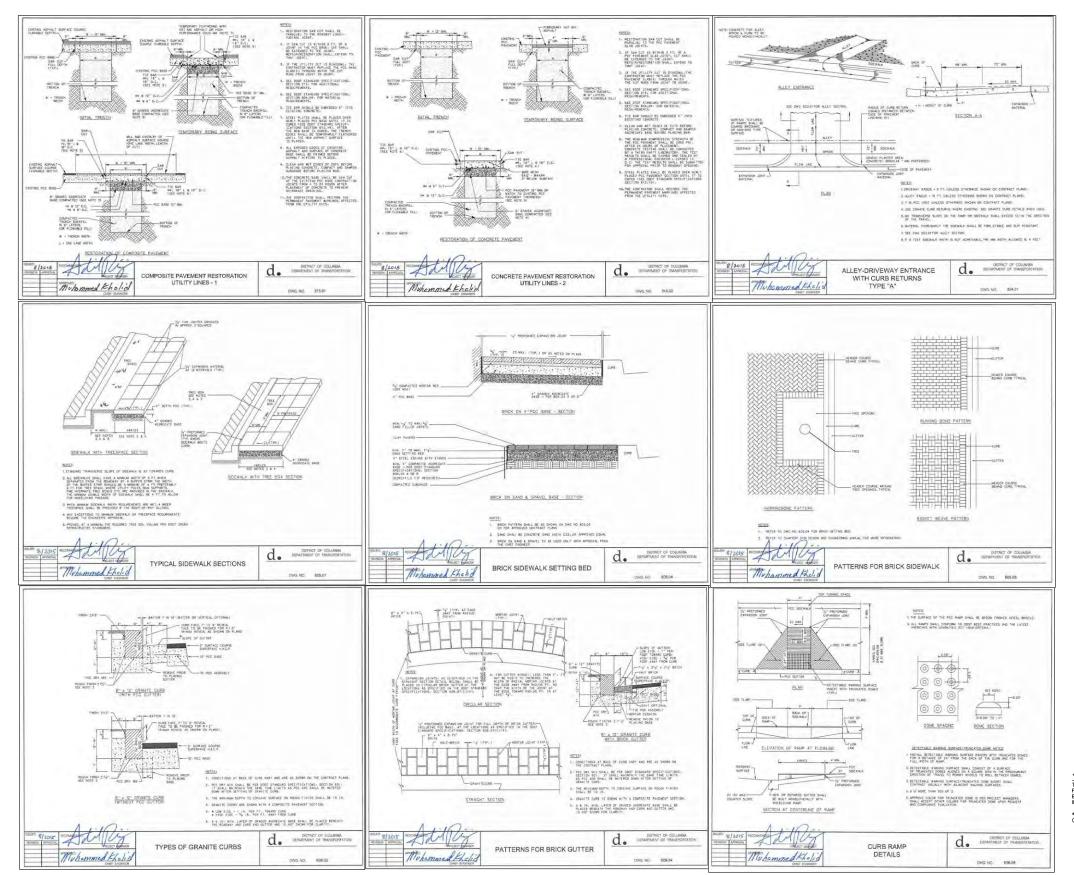
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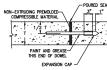
SITE DETAILS

Scale

C-502







NOTE:
I.ALL FORMED JOINTS SHALL BE FINISHED WITH 1/4" RADIUS.
2 SIZE JAMO SPACING OF DOWELS IN TRANSITION SECTION
SHALL BE ODVERED BT THROSET EIGE.

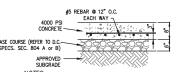
THICKNESS DOWELS
OF SLAB DIAMETER LENGTH SPACING

1" 16" 12"

DOWELED TRANSVERSE EXPANSION JOINT FOR CONCRETE DRIVEWAY PAVEMENT



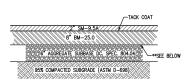
CONTRACTION JOINT WITH LOAD TRANSFER FOR CONCRETE DRIVEWAY PAVEMENT



NOTES:

1. PROVIDE EXPANSION JOINTS ALONG FACE OF BUILDINGS, WHERE NEW CONCRETE PAYEMENT MEETS EXISTING FIXED OBJECTS AND AS SHOWN ON THE SITE PLAN.

TYPICAL CONCRETE PAVEMENT DETAIL
FOR DRIVEWAY APRON
(NOT TO SCALE)



*DDOT PAVEMENT NOTE:
THE CONTRACTOR HAS THE OPTON OF USING THE ABOVE BITUMNOUS ASPHALT SECTION FOR ALL PROPOSED STREETS. THIS SECTION MAY BE MODIFIED BASED ON CBR VALUES TAKEN IN THE FIELD BY A CERTIFIED GETIECHICAL ENGNEER. CONTRACTOR SHALL COORDINATE WITH THE DDOT INSPECTOR PRIOR TO THE STATE OF PAVEMENT INSTALLATION.

**CONTRACTOR HAS THE OPTION OF INSTALLING A 4" LAYER OF FREE DRAINING AGGREGATE OR SEAL COATING THE AGGREGATE SUBBASE.

BITUMINOUS ASPHALT PAVING (NOT TO SCALE)